Ros an Mhíl

An Economic Survey to Determine the Level of Seafood Activity and Establish its Economic Importance to the Area

Bord Iascaigh Mhara
Irish Sea Fisheries Board

Ros an Mhíl

An Economic Survey to Determine the Level of Seafood Activity and establish its Economic Importance to the Area of Ros an Mhíl

This report is the result of a collaborative action by local stakeholders to document and analyse the level of seafood activity in the geographical region centered on Ros an Mhíl, Co. Galway, Ireland. The input of community stakeholders facilitated by Iasc Mara Teo and Galway and Aran Co-operative with the assistance of Peter Tyndall (Bord Iascaigh Mhara) and co-ordinated by Dr Naomi S. Foley (Marine Economic Consultant) formed the basis of the quantitative and qualitative information presented. The provision of fisheries information and engagement with the process by State agencies is acknowledged, particularly that of Bord Iascaigh Mhara (The Irish Sea Fisheries Board) who provided the support necessary to achieve the objectives of this study.

The Fisheries Development Manager,
Fisheries Development Division,
Bord Iascaigh Mhara,
Crofton Road,
Dun Laoghaire,
Co. Dublin,
Ireland.

Citation: Foley, N.S., Curtin, R., Jackson, E., Keatinge, M., Maloney, D., Nolan, C. and Tyndall, P. (2016). An Economic Survey to Determine the Level of Seafood Activity and Establish its Economic Importance to the Area of Ros an Mhíl. Ros an Mhíl Case Study Report. Fisheries Economics Group, Bord Iascaigh Mhara.

Cover image courtesy of Susan Walsh

Acronyms

BIM	Bord Iascaigh Mhara
CSO	Central Statistics Office
DAFM	Department of Agriculture, Food and the Marine
ED	Electoral Division
EFF	European Fisheries Fund
EU	European Union
FHC	Fishery Harbour Centre
FIFG	Financial Instrument for Fisheries Guidance
FTE	Full Time Equivalent
GT	Gross Tonnage
ICES	International Council for Exploration of the Sea
kW	Kilo Watts
LOA	Length Overall
SA	Small Area
SDC	Seafood Development Centre
SFPA	Sea Fisheries Protection Authority

Table of Contents

Ros an Mhíl

Executive Summary vi

1. Introduction 1

1.1 General Description 1

1.2 Location 1

1.3 Geographical Characteristics 1

2. Socio-Economic Profile 2

2.1 Population 2

2.2 Age Dependency Rate 4

2.3 Education 4

2.4 Employment 5

2.4.1 Proportion of Adult Population in Professional Occupations 5

2.4.2 Proportion of Adult Population in Semi and Unskilled Manual Occupations 6

2.5 Unemployment 7

2.5.1 Male Unemployment 8

2.5.2 Female Unemployment 8

2.6 Relative Affluence and Deprivation 9

3. Economic aspects 10

3.1 Economic Activities 10

3.2 Tourism 10

3.2.1 Marine Tourism 10

3.3 Marine Transport and Other Services 11

3.4 Sector Summary 12

3.5 Infrastructure 14

3.6 Local Development Plans 15

4. Fisheries & Aquaculture Sub-Sectors 17

4.1 Fisheries Infrastructure 19

4.2 Details of the Local Fishing Fleets 20

4.3 Key Fish Stocks 25

4.4 Details of the Local Catching Sector 31

4.4.1 The Hinterland Fisheries 36

4.5 Details of the Local Processing Sector 39
4.6 Details of the Local Aquaculture Sector 41
4.7 Details of the Local Ancillary Sector 43
5. Governance **44**
5.1 Key Local Institutions 44
5.2 Public Intervention 46
5.3 Advisory Group 47
6. Qualitative Interpretation and Analysis **48**
6.1 Summary Findings 48
6.1.1 Socio-Economic Profile 48
6.1.2 Fishing Sub-Sectors 48
6.2 Challenges 50
6.3 Adaptation and Diversification 51
6.4 Future Development 52

Tables

Table i. The volume and value of landings by species group to Ros an Mhíl vi

Table ii. Actions proposed by the stakeholders to support the fisheries sector xi

Table 1. Total population for the EDs surrounding Ros an Mhíl 3

Table 2. Male and female population for Ros an Mhíl SA 3

Table 3. Age dependency rate (%), 1991 – 2011, at ED 4

Table 4. Percentage of the adult population with primary education only 5

Table 5. Percentage of the adult population with third level education 5

Table 6. Proportion of adult population in professional occupations 6

Table 7. The proportion of adult population in semi and unskilled manual employment 6

Table 8. Principle economic status of those aged 15 years or over 7

Table 9. Male unemployment rates 8

Table 10. Female unemployment rates 9

Table 11. Ros an Mhíl geographical area relative affluence and deprivation 9

Table 12. Rounded passenger figures out of Ros an Mhíl 12

Table 13. The seasonality of economic activity by sector in Ros an Mhíl 13

Table 14. The characteristics of the polyvalent fleet segments of the Ros an Mhíl fleet 20

Table 15. Management characteristics of the fish stocks harvested by the Ros an Mhíl fleet 25

Table 16. Trends in Irish quota for species of importance to the Ros an Mhíl fleet 28

Table 17. The volume (tonnes) and value (€ '000) of catches into Ros an Mhíl 31

Table 18. Landings (tonnes) by species made by Irish registered vessels to Ros an Mhíl 34

Table 19. Price trends for selected species at Ros an Mhíl 35

Table 20. The main markets and product form for species landed into Ros an Mhíl 35

Table 21. The characteristics of the fleet landing into small local harbours 37

Table 22. Examples of product form and markets for the processing sector 39

Table 23. Annual turnover of companies in the processing subsector and employment 40

Table 24. The volume, value and FTE employment of aquaculture production Ros an Mhíl 41

Table 25. The volume, value and FTE of the aquaculture subsector for Ros an Mhíl area 42

Table 26. Annual turnover and employment (FTE) in the ancillary subsector of Ros an Mhíl 43

Table 27. Public intervention in the Ros an Mhíl area 46

Table 28: Key contacts in Ros an Mhil fisheries sector 47

Figures

Figure i. The contribution to total turnover made by the different sectors vii
Figure ii. The contribution to employment (FTE) by different sectors vii
Figure 1: The location of Ros an Mhíl Harbour, Co. Galway 1
Figure 2: The Ros an Mhíl defined geographical area 2
Figure 3: Unemployment rate for Cill Chuimín ED 7
Figure 4. The contribution to the total turnover made by the different sectors 14
Figure 5. The contribution to employment (FTE) by different sectors 14
Figure 6: Monthly landings (tonnes) by species from Irish registered vessels 18
Figure 7. Ros an Mhíl Harbour 19
Figure 8. Number of vessels by vessel length (LOA) for the polyvalent general segment 22
Figure 9. Employment (Full Time Equivalents, FTE) characteristics by vessel length 22
Figure 10. Age profile for Irish fisheries employment 23
Figure 11. Gross tonnage (GT) by vessel length for the polyvalent general segment 23
Figure 12. Engine power (kW) characteristics for the polyvalent general segment 24
Figure 13. Trends in the volume of landings by species group to Ros an Mhíl 33
Figure 14. Trends in the value (€ '000) of landings by species group to Ros an Mhíl 33
Figure 15. Location of small local harbour/piers in the Ros an Mhíl hinterland 36
Figure 16. Trend between turnover and FTE 2004 – 2011 in the Ros an Mhíl processing sector 40

Executive Summary

Ros an Mhíl, located in the Connemara Gaeltacht, is the largest and busiest port in County Galway and acts as the main base for the Galway and Aran Co-op fishing fleet. As well as being a busy fishing port, a large amount of fish processing takes place in the area. Its proximity to the Aran Islands also makes Ros an Mhíl FHC invaluable to the residents of the islands and acts as a catalyst for the development of the island based tourism industry.

The total landed value of fish into Ros an Mhíl in 2013 was €15.5m all landed by Irish vessels targeting pelagic species, nephrops, tuna and whitefish. 71% of that value was from the nephrops fishery while pelagics accounted for the highest volume, 40%. Foreign landings in this port reached a peak in 2004 of 3% of total landings, averaging 1% up until 2005 while the last recorded landings occurred in 2008.

Table i. The volume and value of landings by species group to Ros an Mhíl from 2004 - 2013. Source: SFPA

Landings to Ros an Mhíl by all vessels										
VOLUME (tonnes)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Demersal	1,649	1,176	883	832	615	818	753	859	1,216	1,756
Pelagic	2,766	8,169	2,606	1,417	2,619	2,493	2,743	2,241	3,139	2,003
Nephrops	604	878	650	952	722	610	824	806	1,120	1,232
Other Shellfish	47	24	23	10	9	8	12	15	7	16
Deepwater	50	51	10	1	1	1	0	0	1	9
Total volume	**5,117**	**10,297**	**4,172**	**3,211**	**3,965**	**3,929**	**4,332**	**3,921**	**5,483**	**5,014**
VALUE (€ '000)	6,135	10,967	9,525	9,285	8,427	6,572	7,592	10,052	13,126	15,512

Economic Aspects

Located in the Connemara Gaeltacht, Ros an Mhíl is situated within the electoral division of Cill Chuimin where 75% of the population speak Irish on a daily basis. The population was estimated as 1,315 in 2011, with a population growth of a mere 6% over the past 20 years in contrast to a national average of over 30%. According to the Pobal HP Deprivation Index the Ros an Mhíl harbour area is considerably more disadvantaged than the country as a whole. The unemployment rate in 2011 was almost 30% compared to a national annual average of 14.6%. On a positive note, while male unemployment was twice the national rate in 2011, female unemployment was below the national average. Semi- and unskilled professions are prevalent in the harbour area and account for a significant share in the locally available jobs.

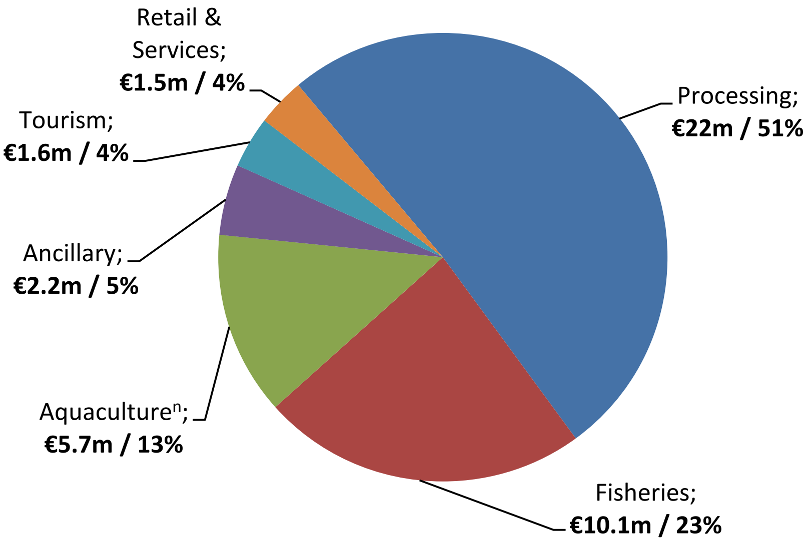

Figure i. The contribution to total turnover made by the different sectors to the Ros an Mhíl economy in 2011. Source: BIM and stakeholder survey. (Note: Aquaculture turnover relates to the area in the immediate vicinitiy of Ros an Mhíl including Kilkieran Bay)

The fisheries sector is the main source of employment in Ros an Mhíl. In 2011, the fish catching and processing sectors were estimated to account for 74% of the value of Ros an Mhíl's economic activities and 72% of FTEs. Including ancillary and aquaculture in this estimation, the economic activities accounted for 92% of turnover and 86% of FTEs. This fisheries related employment is remarkably high compared to the already dependent ports of Castletownbere (81%) and Killybegs (69%). Sectors such as tourism make only a small contribution to Ros an Mhíl despite it acting as the main ferry terminal to the Aran Islands.

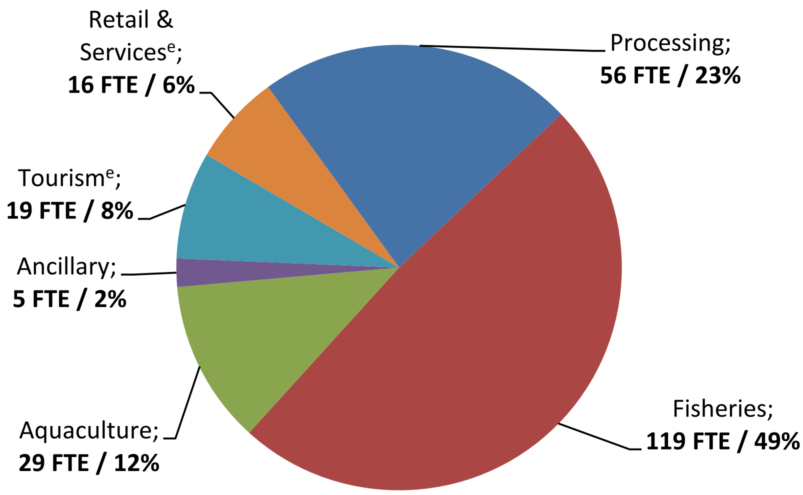

Figure ii. The contribution to employment (FTE) by different sectors in Ros an Mhíl in 2011. Source: BIM and Ros an Mhíl stakeholder survey. (Note: ^{e} denotes estimated figures)

Fisheries Sector

There are 27 vessels employing 119 Full Time Equivalent crew (FTE) within the Ros an Mhíl fleet. Of these, 8(30%) are inshore vessels 12 meters or less in length. A further 8 (30%) are between 12 and 18 metres in length. The remaining 11 (40%) are over 18 meters in length. While the number of vessels in the 18 – 24m segment decreased significantly due to decommissioning, there has been growth in the inshore fleet and the gross tonnage for the 24-40m segment increased by 38% from 2008.

The number of vessels declaring landings into Ros an Mhíl is different to the above figures as vessels not based in the port land there. In 2013, 48 vessels landed into the port. All 48 vessels are of the polyvalent general segment. Since 2008 the >24m segment has declined by 24% in number, the 18-24m by 36% and the 12-18m by 9%. It is estimated that from these vessels landing in Ros an Mhíl 238 FTEs are generated.

In 2013, the catching sector had an estimated turnover of €15.5m. The pelagic subsector accounted for 40% of landings volume but only 11% of landed value to Ros an Mhíl. Nephrops are the most valuable species landed accounting for 71% of the landings value and 25% of volume.

There are 205 vessels operating out of the small local harbours in the defined Ros an Mhíl hinterland (Co. Galway and North Co. Clare). The majority of vessels, 91%, are less than 10m, of which 64% are polyvalent general and 27% are polyvalent potting. The remaining 9% of vessels are less than 12m; 3 are specific (1.5%) targeting clams and razors, 2 (1%) are in the polyvalent potting sector and 12 (6%) in the polyvalent general sector.

The processing sector adds value to the fish landed in Ros an Mhíl. The sector employed 56 FTE staff in 2011 and contributed almost €22m in turnover to the local economy, representing the largest sub-sector in turnover terms. Processors are highly dependent on local landings, with most fish purchased from vessels operating out of Ros an Mhíl. During certain periods of the year local vessels land into other harbours, such as Ringaskiddy, from where the fish is then transported back to Ros an Mhíl for sale or processing. Pelagics and shellfish represent the most important sectors for value added. The majority of processed products are exported to Continental and Eastern Europe and Africa.

The impact of the fishing and fish processing industries of Ros an Mhíl spread far beyond the immediate locality into the regional, Co. Galway, Co. Clare, and national economies. At the regional level, an estimated 213 jobs and €50m of output in the economy of Co. Clare and Co. Galway depend directly, indirectly and as a result of the induced effects of the 119 jobs and €15.5m output in the fishing sector. Furthermore, analysis of the processing industry indicate that 270 jobs and €58m of output in the regional economy depend directly, indirectly and as a result of the induced effects of the 56 jobs and €22m output in the fish processing sector[1].

The aquaculture sector within the immediate area of Ros an Mhíl FHC is concentrated in Kilkieran Bay where scallops, oysters and salmon are produced. There is a small scale abalone

[1] All multiplier figures here are based on 2010 data carried out by Erinshore Economics and updated to most current value and employment figures.

farm, employing approximately 2 FTE in Ros an Mhíl specifically. The volume and value has fluctuated over the last ten years, due in part to production cycles. In employment terms, the finfish farming sector is estimated to employ 13 FTE and the shellfish sector 15.5 FTE within the immediate area of Ros an Mhíl. A large proportion of employment in the sector, in particular shellfish, is casual employment. In 2011 the shellfish sector had 81 casual employees. Aquaculture within the defined hinterland area, Cleggan to Doolin, is estimated to employ 50 FTE in finfish farming and 94 FTE in the shellfish sector.

The ancillary sector in Ros an Mhíl is small scale. Ancillary services located in Ros an Mhíl include chadlery, net repair, light engineering, and harbour services including an ice plant. Fuel is supplied by Galway and Aran Co-op and other external suppliers. Engineering, hydraulics, cold stores and insurance businesses are based mostly in Galway. Other ancillary services are available in neighbouring towns. Vessels have to travel to Killybegs or Cork for major repairs.

Challenges

Access to the resource is a challenge for vessels operating out of Ros an Mhíl. Ros an Mhíl is a major landing port for herring and should benefit from proper management of the North West herring fishery. The quota for this fishery has declined over the years. During the same period the Celtic Sea herring stock has increased. A thorough management and recovery programme should be introduced for the fishery.

Pelagic processors are hampered by access to adequate supplies of fish throughout the year. They process for 6 – 7 months of the year but have to carry overheads for the entire year, making it difficult to remain profitable. The lack of a deepwater landing facility was cited as a major constraint to Ros an Mhíl making it impossible for larger vessels to land into the harbour which results in it missing out on species such as blue whiting with its related processing opportunities. If blue whiting was landed into Ros an Mhíl the processing season would be extended by approximately two months.

Despite Ros an Mhíl being a FHC, there is no dry dock facility. The local fleet have to travel to Baltimore in Co. Cork or Killybegs in Co. Donegal for essential maintenance and preparation for regular MSO surveys, incurring large costs. A recent survey by the Galway and Aran Fishermen’s Co-op estimated the cost of steaming back and forth from Ros an Mhíl to either harbour at approximately €6,000; additional costs include crew accommodation and travel costs for the duration of works being carried out.

High running costs and access to finance were also cited as barriers to business development. The rates and charges for FHC were revised in 2012 and these have been identified as an additional barrier to the fishing sector. High fuel prices pose problems for the industry.

Cheap imports and poor labelling and traceability were identified as an issue the industry has to overcome. Labelling on seafood is minimal; ‘North East Atlantic’ provides minimum information on the species for sale. The industry is also competing with cheaper imports from other European countries as well as imports of fish from outside the EU such as pangasius, tilapia and other farmed fish, whitefish and prawns.

Adaptation

The harvest sector has adapted to increased fuel costs and demands for reduced discards through the utilization of more selective and fuel-efficient gear. Mesh sizes have been increased through the use of square mesh panels and along the east coast Swedish grids are used to reduce cod by-catch in the nephrop fishery.

The importance of fish quality and appropriate stock management is widely recognized in the fishing industry. Members of the Irish pelagic fleet have the MSC label for mackerel and herring while members of the demersal fleet targeting whitefish avail of the BIM quality label. Vessels have also diversified into other fisheries such as tuna. The fleet is getting better at locating tuna resources and in 2011 exported 3,000 tonnes.

The processing sector has developed new products. Breizon has created a new label 'Windows to the Sea' retailing ready to eat seafood products specifically for the Irish market. The abalone farm is developing canned abalone in conjunction with BIM to add value to their product. The ancillary sector has looked to diversify into non-fishing sectors.

Opportunities

Planning permission for a deep-water quay providing 200m of berthage and 8m of depth alongside is already in place. This planning permission is valid until 2016. It is a natural harbour with a depth of 10m and does not require a breakwater. Presently there are no foreign landings into Ros an Mhíl. The proposed development would allow larger vessels to land their catches into Ros an Mhíl and thus attract foreign landings. The DAFM's Food Harvest 2020 states: '88% of the fish caught in the Irish EEZ is by non-Irish vessels. Trends in fuel prices suggest it will be more advantageous for more non-Irish vessels to land in Ireland than in their home countries, which if available for sale in Ireland would benefit domestic processors. The development would create the potential for processors and agents to add value to landings from non-Irish vessels before transhipment to the continent.

A programme to promote the recovery and development of the fishing industry would clearly benefit both the fishing and fish processing segments. The gain would be magnified throughout the regional and Irish economies as a whole since the potential for both industries could be greater in absolute terms for output, income and employment.

The way forward

Attendees at a local stakeholder workshop held on 18th July 2013 considered what actions could be taken to support Ros an Mhíl and its fisheries sector (Table ii). A 'way forward' identifying how these actions could be delivered was also discussed. The two main actions identified at the meeting were the development of (1) a deep water quay for which planning is in place and (2) the construction of a dry dock facility. Both developments are considered to be of significant benefit to all fisheries sectors in Ros an Mhíl.

Table ii. Actions proposed by the stakeholders to support the component parts of the Ros an Mhíl fisheries sector

Sector	Actions
Catching	• Establishment of a dry dock facility • Deep-water quay • New gear adaptations and fishing techniques • Enhance quality and value • Upgrading of auction hall • Better labelling of seafood • Explore and develop the potential for future non fishing work such as Guard Vessels
Processing	• Deep-water quay • Extend the processing season • Encourage foreign landings to Ros an Mhíl • Promote more products in Ireland and UK • Differentiate product in market place
Aquaculture	• Add value to aquaculture products • Future aquaculture developments
Ancillary	• Retention of BIM ice plant • Development of dry dock facility to increase demand for local ancillary services • Deep water quay
Other Sectors	• Marina development / expansion for marine tourism • Potential tourist attraction – develop a tourism master plan

Conclusion

Ros an Mhíl has an exceptionally high dependency on the fishing sector of over 90% for total turnover and 86% of full-time employment in the community. The processing sector is the most important sector for the Ros an Mhíl economy generating €22m in turnover and contributing 56 FTEs, while the catching sector, with a turnover of €15.5m, is the most important employer, sustaining 119 FTE.

While the Ros an Mhíl fleet has remained relatively stable over the years the total number of vessels landing into the port has declined and this decline is mainly in the larger vessel categories (>18m). Landings into Ros an Mhíl for most species groups have remained stable over the years with nephrops the exception, increasing by 50% from 2011-2013. The growth in value generated by nephrops is exceptional, increasing seven fold since 2004, and 93% since 2011. While the increase in landings has contributed to this growth in value, improved prices have played an important role, especially for frozen nephrops. Pelagics compose the majority of landings into the port yet the seasonality of these represents a limiting constraint on the processing sector.

Opportunities exist to develop the infrastructure of the harbour with the need for a dry dock and a deep-water quay identified by the stakeholders as important elements. The former would reduce costs for the catching sector while the latter would allowincreased landings, aiding the processing and ancillary sectors. Additional pelagic quota for smaller vessels could provide necessary supply for the processing sector in the short-term. Tourism represents an under-exploited opportunity for the town with significant potential to diversify the local economy.

1. Introduction

1.1 General Description

Ros an Mhíl, located in the Connemara Gaeltacht, is one of Ireland's six fishery harbour centres (FHC). It is the largest and busiest port in County Galway and acts as the main base for the Galway and Aran Co-op fishing fleet. As well as being a busy fishing port, a large amount of fish processing takes place in the area. There are a number of smaller quays and harbours throughout County Galway at which the smaller inshore vessels land. The next FHC to the south of Ros an Mhíl is Dingle, approximately 90 nautical miles, and to the north is Killybegs, 120 nautical miles away. Ros an Mhíl is also a ferry hub for the Aran Islands and acts as a catalyst for the development of the Island based tourism industry, connecting the three islands to mainland Galway. A passenger ferry service is provided on a year round basis. A cargo company also operates out of the harbour.

1.2 Location

Ros an Mhíl is located in the south Connemara Gaeltacht region, approximately 40km from Galway City. Ros an Mhíl is part of the Cois Fharraige district of Connamara that stretches from the western fringe of Galway City westwards along the northern coast of Galway Bay to Baile na h-Abhann and Ros an Mhíl.

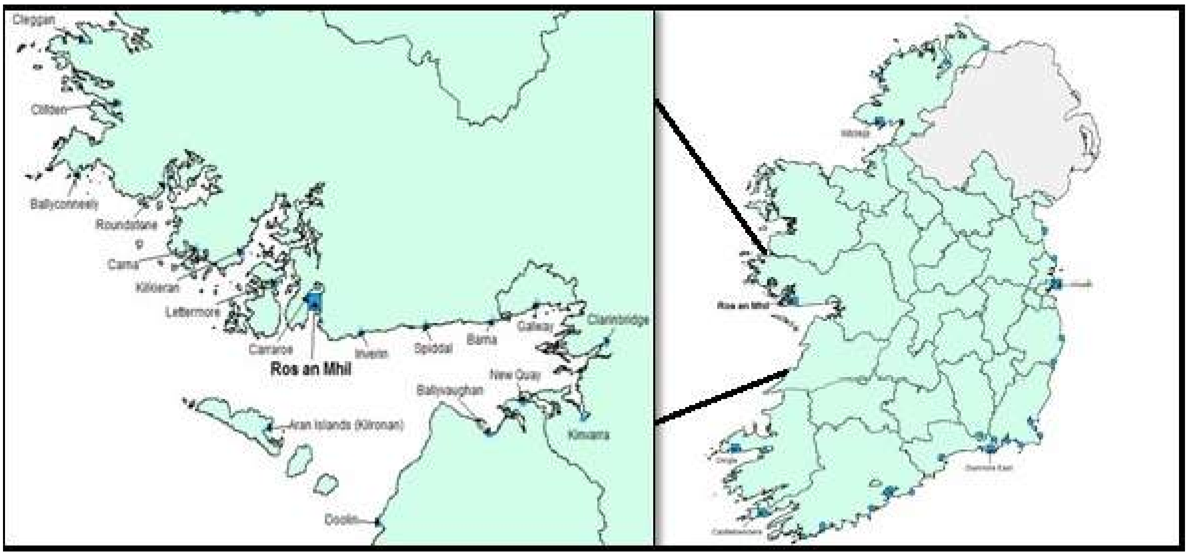

Figure 1: The location of Ros an Mhíl Harbour, Co. Galway. Source Haase & BIM 2013. Coords: 53° 15'58"N 09°33'39"W.

1.3 Geographical Characteristics

Ros an Mhíl inner harbour is positioned on the North Eastern shore of upper Cashla Bay and is very sheltered. The jurisdiction of the Fishery Harbour Centre stretches out as far as a line from Aillecluggish Point to Cannon Rock. Access to Cashla Bay is through a well-defined and marked channel[2]. The land around the Ros an Mhíl area is undulating with a thin layer of low-fertility soil overlaying granite bedrock. Its field systems and stone wall boundaries derive from a Rundale system of land division and tenure that was driven by the Congested Districts Board from 1891 to 1923 and subsequently handed on to the Irish Land Commission[3].

---

[2] *Development of business plans for the fishery harbour centres.* Burke and McIver Consult. DAFF, 2009.
[3] *County Development Plan 2009-2015*. Galway County Council, 2009.

2. Socio-Economic Profile[4]

This section presents the key socio-economic indicators for the Ros an Mhíl region. Ros an Mhíl is located within the Cill Chuimín Electoral Division (ED). The ED is part of the Cois Farraige district.

Information received from Galway and Aran Co-Op indicates that those involved in fishing out of Ros an Mhíl reside in the surrounding area, in particular the EDs of Cill Chuimín, Árainn, Sailearna and An Crompán[5]. Thus the socio-economic profile focuses on these EDs and combined they are referred to as the *geographical area* (Figure 2). Particular attention is given to Cill Chuimín which is the ED surrounding Ros an Mhíl.

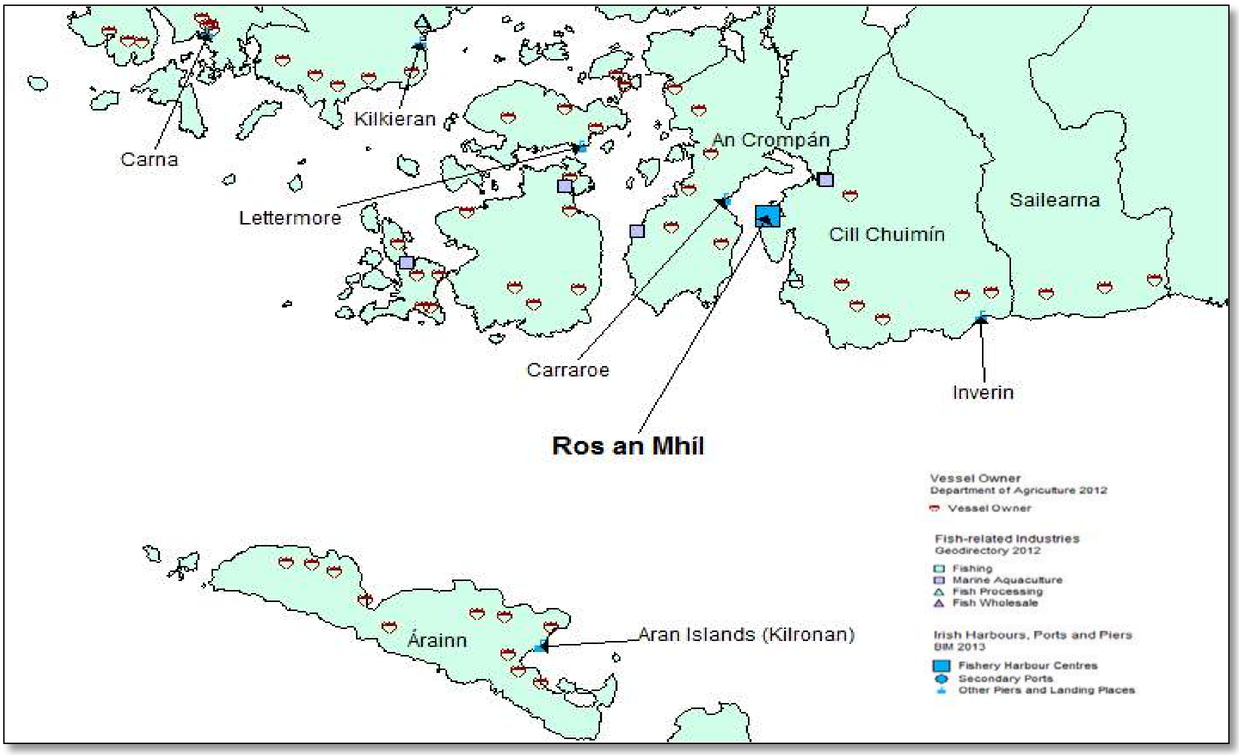

Figure 2: The Ros an Mhíl defined geographical area showing the electoral divisions of Sailearna, Cill Chuimín, Árainn and An Crompán, vessel owners, fish related industries and harbours, ports and piers. Source: Haase and Engling.

2.1 Population

Ireland has experienced a population growth of 30.1% over the past 20 years. Following a marginal decline of 0.4% between 1986 and 1991, the population grew by 2.8% in the following census period and at just over eight per cent in each of the last three five-year periods. This also applied for the 2006 to 2011 period, i.e. after the onset of the recession in late 2007. Population growth for County Galway was approximately 35% over the twenty year period.

---

[4]The information in this section is based on the study '*A Socio-Economic Profile of Ireland's Fishing Communities – The Ros an Mhíl Harbour Centre'* by Haase and Engling (2013)

[5] An earlier study similarly found that those involved in fisheries in this area were found mainly in Árainn, An Crompán and Cill Chuimín, (Meredith 1997).

Population growth in the Ros an Mhíl geographical area over the past twenty years compared to the national rate was more modest at 14.5%, pointing to an underlying weakness of the Harbour area. The population growth specifically within the Cill Chuimín ED from 1991 – 2011 was a mere 6%.

Table 1. Total population for the EDs surrounding Ros an Mhíl, Cill Chuimín, the defined geographical area, County Galway and the national population levels. The table presents the change in population from 1991 – 2011 at each level. Source: Haase and Engling

Geographical Level		1991	1996	2002	2006	2011	Change 1991-2011
Electoral Division	Sailearna	1,051	1,148	1,299	1,362	1,448	37.8%
	Cill Chuimín	1,241	1,273	1,298	1,304	1,315	6.0%
	An Crompán	2,077	2,167	2,266	2,294	2,505	20.6%
	Árainn	1,322	1,303	1,280	1,225	1,251	-5.4%
Geographical area		**5,691**	**5,891**	**6,143**	**6,185**	**6,519**	**14.5%**
County	Galway	129,511	131,613	143,245	159,256	175,274	35.2%
National	Ireland	3,525,719	3,626,087	3,917,203	4,239,848	4,588,252	30.1%

The figures indicate that Cill Chuimín ED, and the overall geographical area, did not experience the population growth that occurred in the rest of the country. An exception to this is Sailearna which experienced an increase of 37.8%. Sailearna is just within the commuter belt for Galway city and the figure points to urban development within the ED (Table 1).

Table 2. Male and female population for Ros an Mhíl SA, geographical area and percentage of Irish spoken on a daily basis. Source: CSO Census Data

Small Area (SA)	Electoral District	Total (2006)	Total (2011)	Male (2011)	Female (2011)	Percentage change (2006 – 2011)	Percentage daily Irish spoken (2011)
Ros an Mhíl (SA)		210	208	104	104	-1	73
	Sailearna	1,362	1,448	712	736	6.3	73
	Cill Chuimín	1,304	1,315	701	614	0.8	75
	An Crompán	2,294	2,505	1255	1250	8.42	74
	Árainn	1,225	1,251	660	591	2.12	76
	Geographical Area	**6,185**	**6,519**	**3,328**	**3,191**	**5.4**	**74.5**

Table 2 presents a breakdown of the male and female population structure and the percentage of Irish spoken on a daily basis from 2006 and 2011. Using the small area population statistics[6] (SA) for 2011, the population of Ros an Mhíl specifically was recorded at 208 with an even divide of male and female and showed a 1% fall in population. However, the

[6] Small Area Population Statistics relate to areas which consist of a small pocket of the population (approximately 80-100 households) and provide the most detailed population data available in Ireland.

overall geographical area experienced a population increase from 2006 to 2011. Located in the Connemara Gaeltacht, approximately 75% of the population speak Irish in a daily basis[7].

2.2 Age Dependency Rate

The age dependency rate provides a proxy for emigration. In Ireland, the response to long-term adverse labour market conditions has been one of emigration, particularly in rural areas. Emigrants are predominantly of working age and tend to have higher education levels. Thus, long term adverse labour market conditions in rural areas do not necessarily express themselves through higher unemployment rates, but predominantly in terms of a thinning-out of the working age cohorts, and thus elevated age dependency rates.

The strong performance of the Irish economy over the 1991 to 2006 period resulted in a steady decline in the age dependency rate (the proportion of population under 15 years of age or over 64 as part of the total population), from 38.1% in 1991 to 31.4% in 2006. Since the onset of the recession in late 2007, and indicative of a return to emigration, the ratio increased to 33% in 2011. Similarly, as can be seen in Table 3, the county age dependency fell from 42% in 1991 to 34.1% in 2006 but marginally increased in 2011 to 35.2%.

The age dependency ratio for the Ros an Mhíl geographical area fell from 42.3% in 1991 to 33.2% in 2006 and then increased to 34.3% in 2011. The age dependency for Cill Chuimín dropped by 11.4 percentage points from 1991 to 2011 and in 2011 was 32.5%, marginally below the national age dependency rate.

Table 3. Age dependency rate (%), 1991 – 2011, at ED, geographical area, county and national levels. Source: Haase and Engling.

Level	Area	1991	1996	2002	2006	2011	Change 1991-2011
Electoral Division	Sailearna	42.0	41.7	34.7	33.0	34.7	-7.3
	Cill Chuimín	43.9	39.8	31.2	33.1	32.5	-11.4
	An Crompán	41.9	38.0	34.2	33.8	35.8	-6.0
	Árainn	41.8	39.4	34.8	32.7	32.7	-9.1
Geographical Area		**42.3**	**39.4**	**33.8**	**33.2**	**34.3**	**-8.0**
County	Galway	**42.0**	**38.7**	**35.6**	**34.1**	**35.2**	**-6.8**
National	Ireland	**38.1**	**35.1**	**32.3**	**31.4**	**33**	**-5.1**

2.3 Education

There has been a continuous improvement in the level of education amongst the adult population over the past 20 years throughout Ireland. In 1991, 36.7% of the adult population had primary education only. This dropped to half that level (18.9%) in 2006 and even further to 16% in 2011.

Education levels for Ros an Mhíl geographical area's adult population are significantly lower than for the country as a whole. Table 4 shows that in the ED surrounding Ros an Mhíl, Cill Chuimín, 28.1% of the adult population had primary education only in 2011. For the

[7] Note: this includes those age 3 and over that speak Irish daily outside the education system daily as well as those that speak Irish within and also outside the education system daily.

geographical area, almost half the adult population had primary education only in 1991, marking a distinctly more disadvantaged composition. However, this rate almost halved over twenty years, to 25.5% in 2011. Although this is a significant improvement, the rate remains almost ten percentage points higher than the national average and over 7.5 percentage points above the county average.

Table 4.Percentage of the adult population with primary education only, at ED, geographical area, county and national levels, 1991 – 2011. Source: Haase and Engling.

Level	Area	1991	1996	2002	2006	2011	Change 1991-2011
Electoral Division	Sailearna	36.8	34.9	26.3	23.4	18.7	-18.1
	Cill Chuimín	48.3	44.7	32.2	31.5	28.1	-20.2
	An Crompán	54.8	48.5	33.3	34.3	26.4	-28.4
	Árainn	48.7	47.2	40.0	30.7	28.8	-19.9
Geographical Area		**48.7**	**44.9**	**33.2**	**30.6**	**25.5**	**-23.2**
County	Galway	42.5	37.3	27.4	22.1	17.9	-24.6
National	Ireland	36.7	29.5	22.2	18.9	16.0	-20.7

With regard to third level education (Table 5), the reverse applies at all levels: national, county and ED. Over the past 20 years third level education has more than doubled. In 1991, 13% of the national adult population had completed third level education. This grew to 30.5% in 2006 and increased by another 0.1% to 30.6% in 2011.

Mirroring the elevated levels of primary education, the EDs surrounding Ros an Mhíl are also characterised by a lower proportion of adults with third level education. This share rose from 10.6% in 1991 to 26.3% in 2011. Despite an increase of 15.7 percentage points over the twenty year study period, the geographical area remains lower than both the national and county rates for third level education. Of the EDs making up the geographical area, Cill Chuimín, which surrounds Ros an Mhíl, has the lowest level where 21% of the adult population have third level education.

Table 5. Percentage of the adult population with third level education at ED, geographical area, county and national level, 1991 - 2011. Source: Haase and Engling.

Level	Area	1991	1996	2002	2006	2011	Change 1991-2011
Electoral Division	Sailearna	15.7	18.5	24.5	28.9	33.1	17.4
	Cill Chuimín	8.2	13.0	17.6	19.6	21.0	12.8
	An Crompán	9.0	14.2	20.1	22.2	26.2	17.1
	Árainn	11.2	14.8	20.2	24.4	24.6	13.4
Geographical Area		**10.6**	**14.9**	**20.5**	**23.6**	**26.3**	**15.7**
County	Galway	11.1	16.3	22.5	28.3	30.0	18.9
National	Ireland	13.0	19.7	26.0	30.5	30.6	17.6

2.4 Employment

2.4.1 Proportion of Adult Population in Professional Occupations

The changes in occupation composition experienced throughout Ireland over the past 20 years largely parallel those in educational achievement, with a gradual increase in the number of professionals and an even greater decline in the proportion of semi- and unskilled manual workers. At national level, the proportion of professionals in all occupations rose from 25.2% in 1991 to 34.6% in 2011, an increase of 9.5 percentage points.

The overall geographical area experienced an increase in the proportion of professionals over the 20 year period. However, this applies to a much lower base than the national rate, starting from 15.8% in 1991 and rising to 27.8% in 2011. Cill Chuimín, the ED in which Ros an Mhíl features, has the lowest percentage of adult population in professional occupations within the geographical area at 24% (Table 6).

Table 6. Proportion of adult population in professional occupations at ED, geographical area, county and national level, 1991-2011. Source: Haase and Engling.

Level	Area	1991	1996	2002	2006	2011	Change 1991-2011
Electoral Division	Sailearna	20.8	21.2	27.8	34.4	37.2	16.4
	Cill Chuimín	11.3	13.4	19.9	21.5	24.0	12.7
	An Crompán	16.5	17.2	20.3	25.5	25.1	8.6
	Árainn	15.0	17.3	23.5	27.8	26.1	11.2
Geographical Area		**15.8**	**17.2**	**22.5**	**27.1**	**27.8**	**12.0**
County	County Galway	20.8	25.0	29.9	33.9	35.9	15.1
National	Ireland	25.2	27.3	31.6	32.9	34.6	9.5

2.4.2 Proportion of Adult Population in Semi and Unskilled Manual Occupations

The past two decades have seen an even greater decline in the proportion of semi and unskilled manual workers. At the national level, the proportion of the semi and unskilled occupations fell from 28.2% in 1991 to 17.5% in 2011, representing a decline by 10.6 percentage points. Semi and unskilled professions are much more prevalent in the Ros an Mhíl geographical area, and account for a significant share in the locally available jobs. Although the share declined from 47% in 1991 to 23.9% in 2011, representing a fall of 23.1 percentage points, the share remains higher than both the county and national rate, see Table 7. The 2011 percentage of semi- and unskilled professions in Cill Chuimín ED and Árainn ED are similar to the levels that occurred nationally and in the county in 1991, over 28%. It is reasonable to assume that the fishing industry provides a significant share of these jobs and thus is a significant job provider for the local economy.

Table 7. The proportion of adult population in semi and unskilled manual employment (%) at ED, geographical area, county and national level, 1991 - 2011. Source: Haase and Engling.

Level	Area	1991	1996	2002	2006	2011	Change 1991-2011
Electoral Division	Sailearna	43.9	39.3	31.3	24.2	19.8	-24.1
	Cill Chuimín	49.7	46.6	34.9	26.6	28.6	-21.2
	An Crompán	49.6	46.0	37.9	28.2	21.4	-28.2
	Árainn	43.3	55.0	43.5	26.7	28.9	-14.4
Geographical area		**47.0**	**46.7**	**36.8**	**26.6**	**23.9**	**-23.1**
County	Galway	28.8	25.1	21.1	18.0	16.7	-12.1
State	Ireland	28.2	24.4	20.2	18.6	17.5	-10.6

2.5 Unemployment

The employable population in the ED surrounding Ros an Mhíl in 2011 was 1,063. The labour force participation rate was 55.6%. Table 8 shows the principal economic status of those aged 15 years or over in the Cill Chuimín ED. The unemployment rate fell from 30.6% in 1996 to 22.2% in 2006. In 2011 the rate increased to 29.6%, only 1% lower than the 1996 rate.

Table 8. Principle economic status of those aged 15 years or over in the ED surrounding Ros an Mhíl, Cill Chuimín, 1996 - 2011. Source: CSO Census Data

Principle Economic Status	1996	2002	2006	2011
Total Ages 15 years and over	**936**	**1,040**	**1,033**	**1,063**
At work	357	451	466	416
Looking for first regular job	35	13	17	8
Unemployed having lost or given up previous job	123	91	116	167
Labour Force	**515**	**555**	**599**	**591**
Unemployment Rate	**30.6%**	**18.7%**	**22.2%**	**29.6%**
Student	93	105	95	113
Looking after home / family	213	173	153	143
Retired	84	106	112	149
Unable to work due to permanent sickness or disability	31	78	71	64
Other	0	23	3	3
Total not in the labour force	**421**	**485**	**434**	**472**

Unemployment was high in 1996 and fell significantly in 2002 for both county and ED, following the national trend. In 2006, the county rate dropped marginally but unemployment in Cill Chuimín ED began to increase. A large increase in unemployment was seen in 2011 for both. In all instances, the unemployment rate was higher for Cill Chuimín ED that the county rate. Figure 3 plots the unemployment rate for Cill Chuimín ED and County Galway for census years 1996 – 2011.

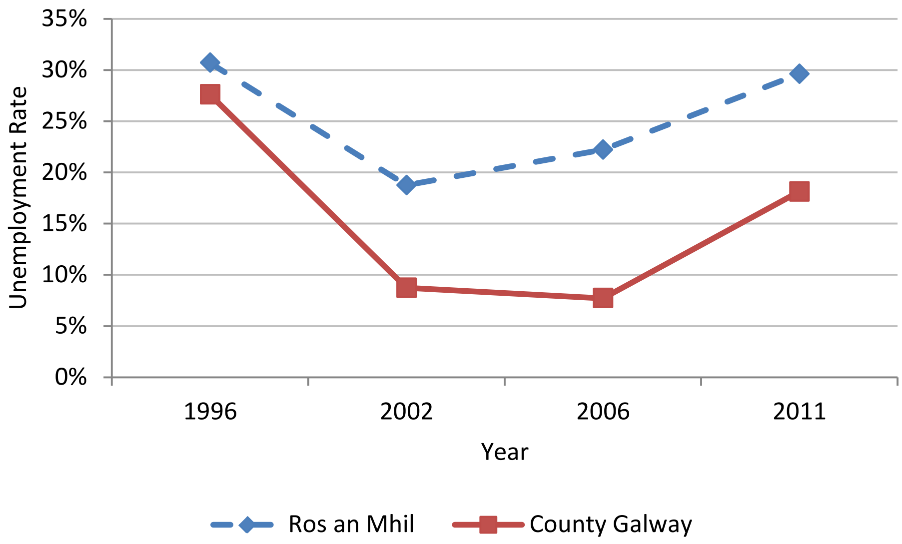

Figure 3: Unemployment rate for Cill Chuimín ED, containing Ros an Mhíl, and County Galway, 2002 - 2011. Source: CSO

2.5.1 Male Unemployment

The Ros an Mhíl geographical area has a distinctly poorer employment history compared to Ireland as a whole or indeed County Galway (Table 9). Unemployment rates broadly halved over the 15-year period from 1991 to 2006, but have subsequently risen to levels surpassing the 1991 levels. Particular attention is therefore paid to the change in trends that relate to the 1991 to 2006 period on the one hand, and the five-year period of 2006 to 2011 thereafter.

In 1991 male unemployment in the defined geographical area was at a staggering 38.6%, exactly twice the nationally prevailing rate. By 2006, this rate had fallen to 20.7%, but this was still more than twice that of the national rate of 8.8%. Since the turn in economic fortunes, male unemployment rates in Ros an Mhíl have climbed back to 36.2%, or 2.4 percentage points below their 1991 levels. This compares to a rate of 22.3% for the country as a whole.

For the specific ED that surrounds Ros an Mhíl (Cill Chuimín), the 2006 unemployment rate was three times the national rate. While other areas experienced a decrease in unemployment in 2006 in Cill Chuimín it increased. By 2011, the unemployment rate for Cill Chuimín was almost twice that of the county. The increase in male unemployment between 2006 and 2011 may be partly attributable to vessel decommissioning. Decommissioning began in 2007 and figures show that potentially 30 jobs could have been lost particularly within the 18 – 24m vessel segment.

Table 9. Male unemployment rates at the ED, geographical area, county and national levels, 1991 – 2011. Source: Haase and Engling.

Geographical Level	Area	1991	1996	2002	2006	2011	Change 1991-2011
Electoral Division	Sailearna	30.4	25.3	17.6	11.8	31.4	.9
	Cill Chuimín	38.3	34.6	19.5	26.6	40.9	2.6
	An Crompán	40.6	38.0	24.6	20.6	39.2	-1.5
	Árainn	41.8	22.5	26.7	23.8	31.4	-10.3
Geographical area		**38.6**	**31.0**	**22.5**	**20.7**	**36.2**	**-2.4**
County	Galway	16.7	15.3	9.4	8.1	21.6	4.9
State	Ireland	18.4	16.4	9.4	8.8	22.3	4.0

2.5.2 Female Unemployment

Female unemployment rates have tended to be slightly below male unemployment rates. As was the case with respect to male unemployment, the female unemployment rates for the Ros an Mhíl geographical area have been persistently above the national rate (Table 10). The rates for Ros an Mhíl exceeded the national rates by a factor of broadly one-and-a-half in 1991, accounting for 21.6% of the female labour force, falling to 12.8% in 2006 and rising again to 20.4% in 2011, which was about one quarter above the national rate.

Table 10. Female unemployment rates at the ED, geographical aera, county and national levels, 1991 – 2011. Source: Haase and Engling.

Geographical Level	Area	1991	1996	2002	2006	2011	Change 1991-2011
Electoral Division	Sailearna	19.7	14.9	8.4	8.0	19.7	.0
	Cill Chuimín	22.2	22.6	17.6	15.4	13.5	-8.7
	An Crompán	19.9	23.4	16.4	14.3	23.7	3.7
	Árainn	26.1	16.6	14.8	13.3	21.1	-5.0
Geographical area		**21.6**	**20.1**	**14.6**	**12.8**	**20.4**	**-1.3**
County	Galway	11.9	10.8	7.6	7.2	13.7	1.8
State	Ireland	14.1	12.0	8.0	8.1	15.0	.9

For the Cill Chuimín ED female unemployment rate specifically, the figures tell a different story to the male unemployment in the area. Unemployment fell in the ED from 1991 to 2006 but unlike the national, county or other EDs in the state, it continued to fall from 2006 to 2011. The Cill Chuimín ED female unemployment rate for 2011 was 1.5 percentage points lower than the national rate and marginally lower than the county rate. It was suggested at a stakeholder consultation meeting that the lower female unemployment rate is due to women working in Galway city, in particular within the public sector.

2.6 Relative Affluence and Deprivation

The Pobal HP Deprivation Index is a method of measuring the relative affluence or deprivation of a particular geographical area using data compiled from various censuses. A score is given to the area based on a national average of zero and ranging from approximately -35 (most disadvantaged) to +35 (most affluent)[8].

The Ros an Mhíl harbour area is considerably more disadvantaged than the country as a whole (Table 11). In 1991, the Relative HP Index score for the Ros an Mhíl geographical area was -11.1, and thus deemed a disadvantaged area by national comparison. Despite a significant improvement of 3.2 points over the 20 year period, the Index score in 2011 was still -7.7 which would still classify the area as one of comparative disadvantage. It is also worth noting that, of the four EDs which make up the Ros an Mhíl geographical area, Sailearna ED is slightly less disadvantaged, whilst the other three EDs score substantially lower with Cill Chuimín, the ED that surrounds Ros an Mhíl, being the most disadvantaged.

Table 11. Ros an Mhíl geographical area relative affluence and deprivation. Source: Haase and Engling.

Geographical Level	Area	1991	1996	2002	2006	2011	Change 1991-2011
Electoral Division	Sailearna	-3.6	-5.3	-2.5	-1.9	-1.1	2.5
	Cill Chuimín	-12.8	-13.4	-9.9	-15.8	-11.8	1.0
	An Crompán	-13.8	-13.4	-11.0	-13.4	-9.5	4.2
	Árainn	-11.4	-8.2	-11.0	-10.3	-8.4	3.1
Geographical area		**-11.1**	**-10.7**	**-9.0**	**-10.7**	**-7.9**	**3.2**
State	Ireland	2.5	3.0	2.9	1.6	2.8	.3

[8] www.pobal.ie

3. Economic aspects

3.1 Economic Activities

Ros an Mhíl, one of Ireland's six fishery harbour centres (FHC), has a number of fish processing companies. The importance of fisheries including processing and aquaculture is discussed in section 4. The following outlines other sectors in Ros an Mhíl.

Economic activities in Ros an Mhíl are highly seasonal. An Irish college is run in Ros an Mhíl from June to August which brings added benefit to businesses in the area including shops, bed and breakfasts and pubs. Ros an Mhíl is the primary harbour for passengers visiting the Aran Islands. Despite this there is a limited tourism presence in the area, with the majority of passengers only spending a short time in Ros an Mhíl. There are three angling charter vessels which contribute to marine tourism. There is also a small cargo company based in Ros an Mhíl which allows the provision of stores, building materials and vehicles to the Aran Islands.

3.2 Tourism

Despite Ros an Mhíl acting as the main ferry terminal to the Aran Islands, there is little tourist activity in the area. Facilities in the harbour centre for tourists are basic offering toilet facilities and some shelters. Tourism activity includes students to the Irish summer college, marine tourism such as sea angling and more recently visitors to the new marina. Ros an Mhíl serves as a ferry port to the islands rather than a tourist destination, thus the value of the ferry service is discussed in the next section.

There are approximately 21 summer Irish colleges in the Galway Gaeltacht, one of which is based in Ros an Mhíl. Though seasonal, running from June to August, the college offers employment to households who provide accommodation to students in their own homes and to teachers (estimated teacher student ratio is 25:1). Shops and other businesses such as bus companies and bed and breakfasts also benefit from the college with family visits and student spending. The college has its own purpose built centre in Ros an Mhíl. The Irish college is the most significant contributor to tourism turnover in Ros an Mhíl.

In Ros an Mhíl village there are two bed and breakfasts and one holiday village with five self-catering houses. The average capacity of each of these results in approximately 53 bed spaces in Ros an Mhíl. Further accommodation is available in the villages around Ros an Mhíl. Most tourists to Ros an Mhíl stay on the islands or return to Galway following a day trip to the islands. The Failte Ireland 2011 estimates on occupancy rates are 35% for Bed and Breakfast and 41% for self-catering while the total overnight stays in Ros an Mhíl amounts to 7,428 bed nights. The average length of stay is 3 nights giving an estimated total number of visits as 2,476.

3.2.1 Marine Tourism

A recent survey by Failte Ireland on the importance of the sea for tourism identified the Aran Islands and waters around Ceathra Rua among the top 40 areas in Ireland for water based activities[9]. The activities identified include sea fishing, diving, swimming, scenic touring and walking.

There are three sea angling/charter vessels operating out of Ros an Mhíl facilitated by top class boarding facilities adding to tourism revenue and employment in the area.

Recent harbour developments in Ros an Mhíl also include a small craft harbour (marina) with capacity for up to 30 boats. The marina was opened in April 2012 and thus there is no turnover to report at this stage. Marinas can, however, generate significant income for the local economy where local businesses will benefit from purchases of fuel, supplies and gifts where the marina is occupied by a boat owner or visitor[10]. A study funded under the Ireland-Wales Interreg Programme found that the average spend per visitor to a marina ranged between €105 and €142 on groceries, gifts, chandlery, entertainment and eating out[11].

There is potential to further develop tourism in Ros an Mhíl such as developing local walking trails. However there is a noticeable lack of facilities such as public toilets, coffee shops or gift shops.

3.3 Marine Transport and Other Services

Ros an Mhíl did not participate in the construction driven aspects of the 'Celtic Tiger'. The most notable activity in the area, in particular during the summer months, is the ferry service transporting passengers to and from the islands. The ferries could be classed under tourism as the majority of tourists to the islands are day trippers and spend little time in Ros an Mhíl however the ferry also serves locals and is therefore classed under marine transport and services.

Up to 2008 / 2009 there were two ferry companies operating out of Ros an Mhíl. This is now reduced to one company. Part of the service is provided under contract from Roinn na Gaeltachta[12] for which it receives a subsidy, conditional on the provision of a ferry service during the winter months. The ferry service is of particular significance to the Aran Island tourism industry. Table 12 presents the number of ferry passengers travelling from Ros an Mhíl. In 2013 an estimated 160,000 passengers took the ferry from Ros an Mhíl to the Aran Islands, this figure includes locals and tourists. The number of passengers peaked in 2006-2007 at 220,000 before suffering a continuous decline thereafter due to the economic recession. However, passenger numbers for 2014 have been noted as an improvement on former years (personal communication with Ros an Mhíl Harbour Master John Donnelly), so it can be expected that these figures will rise as the economic outlook improves.

The main office for the ferry company is based in Galway, thus turnover related to the ferry service for Ros an Mhíl is mostly related to passenger spend on services offered in the area

[9] *Determination of Waters of National Tourism Significance and Associated Water Quality Status.* Bord Failte, 2009.

[10] *Development of business plans for the fishery harbour centres.* Raymond Burke and McIver Consulting for the Department of Agriculture, Fisheries and Food, 2009.

[11] *The potential for growing marine leisure: a study establishing the scope and opportunities for expansion on the east coast of Ireland.* Countryside Consultancy; Tourism Development International and Drima Marketing, November 2011.

[12] Department of Arts, Heritage and the Gaeltacht

including the terminal office and car parking facilities. In 2009 the ferries employed thirty people during the winter months and a total of seventy during the summer months, some but not all of these were employed in Ros an Mhíl. During the summer months in particular, local businesses benefit from the passing tourists. Using Failte Ireland figures for 2011 for the average spend of a day tripper on miscellaneous goods and the figures for number of passengers the annual turnover from the ferry service to the area is estimated[13].This estimate takes into account spend in the local pubs, shops as well as car parking facilities.

Table 12. Rounded passenger figures out of Ros an Mhíl. Source: Ros an Mhíl Harbour Master

Year	Number of Passengers
2004	175,000
2005	190,000
2006	220,000
2007	220,000
2008	190,000
2009	175,000
2010	176,000
2011	173,000
2012	163,000
2013	160,000

In addition to the ferry company, a cargo company operates out of Ros an Mhíl with a sister company based in Galway. The main cargo service operates out of Galway, under a contract from Roinn na Gaeltachta. There are an additional 20 runs per year subsidised by Roinn na Gaeltachta from Ros an Mhíl to the islands for transport of heavy goods vehicles and machinery providing an essential service to the islands. The company currently employs approximately 4 FTE in Ros an Mhíl.

Further services in the area include a shop and two pubs. Retail is driven by tourists during the summer months but during the winter 70% of trade in the area is dependent on fisheries (local trading figures).

3.4 Sector Summary

Activities in Ros an Mhíl are highly seasonal as shown in Table 13. Peak tourist season runs from May to September which sees large numbers of tourists passing through. Both transport companies, passenger ferry and cargo, are subsidised by Roinn na Gaeltachta to maintain the service during the winter months.

Processors in the area focussing on pelagics only operate 6 -7 months of the year, from September to March, due to the seasonality of the fishery, but have to carry overheads for 12 months of the year. Similarly, shellfish processing is seasonally dependent.

[13]The value of tourism is calculated from the percentage spend on miscellaneous items for a day trip estimated by Failte Ireland times the number of passengers in 2011. This figure accounts for spend on car parks, tea / coffee etc.

Table 13. The seasonality of economic activity by sector in Ros an Mhíl

Sector	Main Period of Activity	
Capture Fisheries: Pelagic catching subsector	Mackerel	October – March
	Herring	October – March
	Tuna	August - November
	Sprat (non-quota)	September - February
Capture Fisheries: Demersal catching subsector	Haddock	All year round
	Whiting	All year round
	Hake	All year round
	Monk	All year round
	Megrim	All year round
	Sole	All year round (mainly bycatch)
	Saithe	All year round
	Cod	All year round (Peak in Spring)
	Pollock	All year round
	Ling	All year round
	Plaice	All year round (Peak in August and September)
	Skate and Rays	All year round
Capture Fisheries: Shellfish catching subsector	Nephrops	All year round
	Crab	All year round (Peak in Autumn)
	Velvet crab	February - November
	Shrimp	August – February
	Lobster	All year round (Peak between May and September)
	Crayfish	Year round (Peak between May and October)
Pelagic Processing	Follows the catching sector	
Ancillary	Vessel supplies corresponding with catch activity. Vessel repairs and maintenance during non-catching months.	
Retail	All year round	
Aquaculture	All year round	
Service Sector (cargo, ferries)	All year round (peak season for ferry tourism May – Oct)	
Colaiste Samhraidh	June - August	
Tourism	May - October	

In terms of the contribution of different sectors to the Ros an Mhíl economy, it is evident that the fishing sector is the backbone of the local economy (Figure 4). The primary production sectors of fisheries and, to a lesser extent, aquaculture create value while the processing sector adds value to this production. Fisheries and processing alone make up 74% of total turnover in Ros an Mhíl. Processing accounted for the largest share of turnover in the area, 51%, followed by fisheries, 23%.

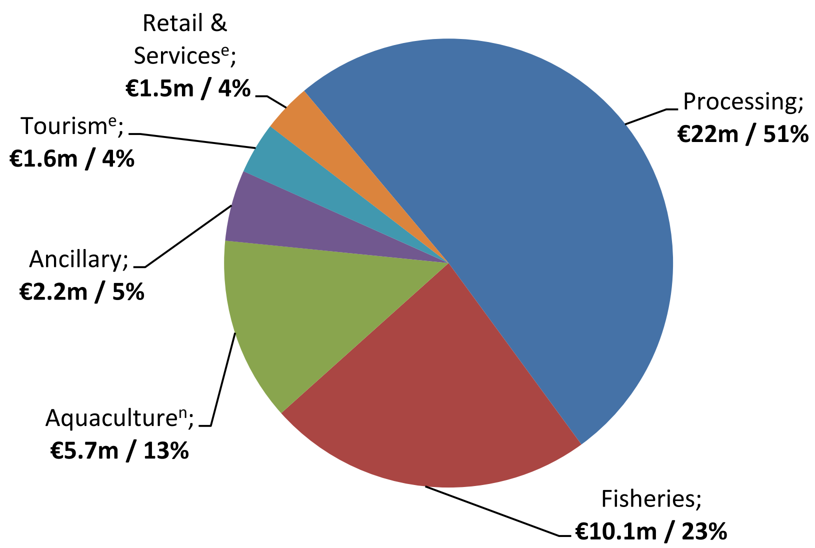

Figure 4. The contribution to the total turnover made by the different sectors to the Ros an Mhíl economy in 2011. Source: BIM and Ros an Mhíl stakeholder survey. (Note: ^{e} denotes estimated figures; ^{n} Turnover for aquaculture relates to the area in the immediate vicinity of Ros an Mhíl including Kilkieran Bay).

While processing was the greatest contributor to turnover in Ros an Mhíl for 2011, Figure 5 shows that in terms of employment, fisheries was the largest employer in the area contributing to 49% of FTE.

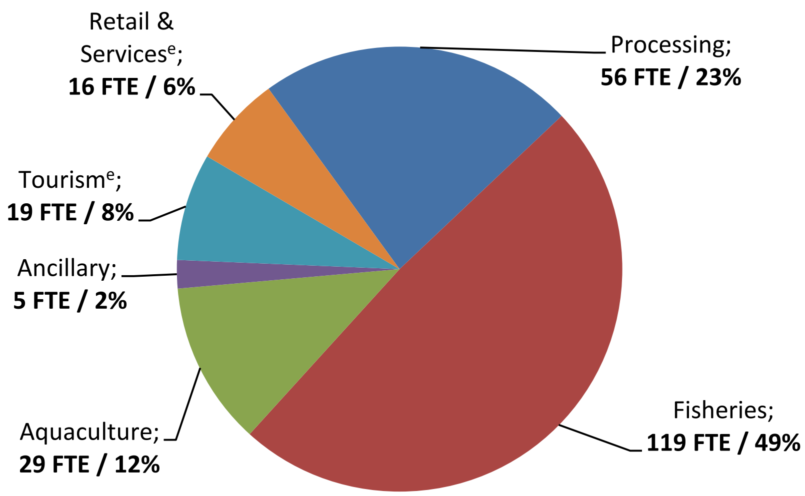

Figure 5. The contribution to employment (FTE) by different sectors in Ros an Mhíl in 2011. Source: BIM and Ros an Mhíl stakeholder survey. (Note: ^{e} denotes estimated figures).

3.5 Infrastructure

The extent to which non-fishery sector infrastructure in available can significantly enable or constrain development and diversification opportunities in any community. The infrastructure serving Ros an Mhíl FHC is poor characterised by bad roads and a lack of facilities for visitors.

- The R336 is the major transportation route which serves the South Connemara area. A feasibility study was carried out for Galway County Council in 2009 which specified the need to improve the road from Galway to Ros an Mhíl to national secondary road status. Changes to the road were open to public consultation in 2012.
- Bus Eireann runs six buses per day, Monday to Saturday from Galway to Leitir Mealllain passing by Ros an Mhíl. There are two services on a Sunday. BEALACH is a rural transport initiative catering for the needs of people living in rural areas of Galway Gaeltacht and the Islands.
- There is no railway to Ros an Mhíl, the nearest rail connection is in Galway.
- Island Ferries Teoaranta operates a ferry passenger link with the Aran Islands from Ros an Mhíl Harbour offering seven sailings during peak season between the three islands, with the most frequent sailings to and from Inis Mór. During the off peak season up to three sailings in both directions are available daily.
- Shannon international airport is approximately 2.5 hours and Dublin airport is 3 hours from Ros an Mhíl FHC. There is an air service provided by Aer Arann Islands providing flights to the Aran Islands from Connemara Regional Airport located in Indrebhan.
- Education infrastructure: Ros an Mhíl has one primary school – Scoil Naisiunta Cholmcille. Secondary schools are based in neighbouring towns of Indreabhan and An Spideal. There is also an Irish summer college in Ros an Mhíl. More general tertiary education establishments are in Galway (e.g. NUI Galway and GMIT).
- Health infrastructure: The closest health centre is located in An Cheathrú Rua; approximately 9km from the harbour centre.The nearest general hospitals are in Galway. Galway University Hospital is 37km from the harbour.
- Industrial sites have been developed by Údarás na Gaeltachta at Baile on tSagairt, Baile na hAbhann, and Ros an Mhíl.
- There is a sewage treatment plant in Ros an Mhíl since 1991.
- Broadband accessibility is very poor at the moment with a speed of 1MB; connectivity needs to be upgraded.

3.6 Local Development Plans

Gaeltacht Local Area Plan 2008 - 2014

The Gaeltacht Local Area Plan, published by Galway County Council in 2008, sets out a six year plan, 2008 – 2014, for the Gaeltacht. Areas are divided into districts and Ros an Mhíl features in the Cois Farraige district.

Community objectives outlined in the plan for the Cois Farraige district include:

- Provision of the new R336 Galway – Casla road
- Improve public bus services
- Provision of broadband services

- Improve water supply

The plan recognises the significance of Ros an Mhíl and states:

Ros an Mhíl harbour is one of the principal fishing harbours in the country and has attained EU status as such. It is also an important ferry passenger link with the Aran Islands and a significant tourism asset. It is an objective of this plan to facilitate the upgrading and improvement of harbour facilities and those of the adjacent industrial estate and village as an important focal point in the economy of South Connemara.

Galway County Council Development Plan 2009 - 2015

Ros an Mhíl also features in the Galway County Council Development Plan 2009 – 2015. Objectives specifically relating to Ros an Mhíl include:

Roads and transportation objective:

- Facilitate the development of a new strategic route along the Cois Farraige corridor from Galway to Scriob via Ros an Mhíl.

Piers and harbours policies:

- Facilitate the development of Ros an Mhíl harbour as the main harbour for County Galway
- Consider the delivery of services / facilities in collaboration with Galway City Council and the Galway Harbour Company that will promote interconnectivity between Ros an Mhíl and Galway Port
- Seek enhancement of existing electricity network at Ros an Mhíl and at other appropriate coastal areas for the promotion of tidal and wave energy and their research and development into the National Grid.

4. Fisheries & Aquaculture Sub-Sectors

The fisheries sector in Ros an Mhíl had a landed value of €15.5m in 2013. Total landed volumes in the catching sector for 2013 was 5,014 tonnes. These were made up of 2,003 tonnes (€1.78m) in the pelagic sector, 1,232 tonnes (€11m) of nephrops and 1,756 tonnes (€2.66m) in the demersal sector. The remaining landings and value were made up of other shellfish species including crab, lobster and crayfish. Landings to Ros an Mhíl are carried out entirely by the domestic fleet. There have been no foreign fleet landings in Ros an Mhíl for the past six years. Between 2003 and 2006 foreign fleets landed a small amount of whitefish species.

Processors in Ros an Mhíl add value to the fish landed. Pelagics and shellfish represent the most important sectors for value added in Ros an Mhíl. While some processed species are maintained for the domestic market, the majority are exported. The main regions for export are Continental and Eastern Europe, Africa, Middle East and Asia. Aquaculture production, mostly outside of Ros an Mhíl harbour area, was 885 tonnes in 2011; 850 tonnes of finfish and 35 tonnes of shellfish. Ancillary services are mostly located outside of Ros an Mhíl.

The value of the fishing industry extends beyond Ros an Mhíl generating employment and income regionally and nationally. The output, income and employment multipliers for the fishing and fish processing sectors in Ros an Mhíl to both the regional and national economy are now described. The results for the fishing and fish processing industries of Ros an Mhíl both in the context of the Irish economy and in the context of the regional economy defined as Co. Clare and Co. Galway indicate that the impact of the two sectors spread far beyond the immediate locality into the regional and national economies. At the regional level, the multipliers indicate that 213 jobs and €50m of output in the economy of Co. Clare and Co. Galway depend directly, indirectly and as a result of the induced effects of the 119 jobs and €15.5m output in the fishing sector. The type II multipliers from the processing industry indicate that 270 jobs and €58m of output in the regional economy depend directly, indirectly and as a result of the induced effects of the 56 jobs and €22m output in the fish processing sector. In general the multipliers for fish processing are higher than those for the fishing sector reflecting the fact that the processing sector purchases the raw materials for its activities. At the national level, the downstream effects are even higher with €57m in additional turnover and 152 additional jobs generated from Ros an Mhíl fishing activity leading to a total of €73m and 268 jobs. For the processing sector an extra €68m and 324 additional jobs are generated in the Irish economy totalling €90m and 380 jobs from Ros an Mhíl processing activity. Although the multipliers for the processing sector are higher than the fishing sector, a programme to promote the recovery and development of the fishing industry would benefit both the fishing and fish processing sectors.

Analysis of monthly landings to Ros an Mhíl from 2011 to 2013 shows seasonal trends for species (Figure 6). Nephrops, the most economically valuable species landed, are landed throughout the year but landings peak in the second quarter, particularly in May. During this period most vessels land nephrops as well as whitefish. Pelagics peak in the first and fourth quarters with landings of mackerel and herring and the smaller vessels landing sprats. The seasonality of pelagics in particular points to the difficulties faced by the pelagic dependent processing sector. A pair trawl fishery for albacore tuna only developed recently. Landings for tuna occur mostly during August. It is clear from the graphs here that during the autumn months there is a lack of material for the sector to process.

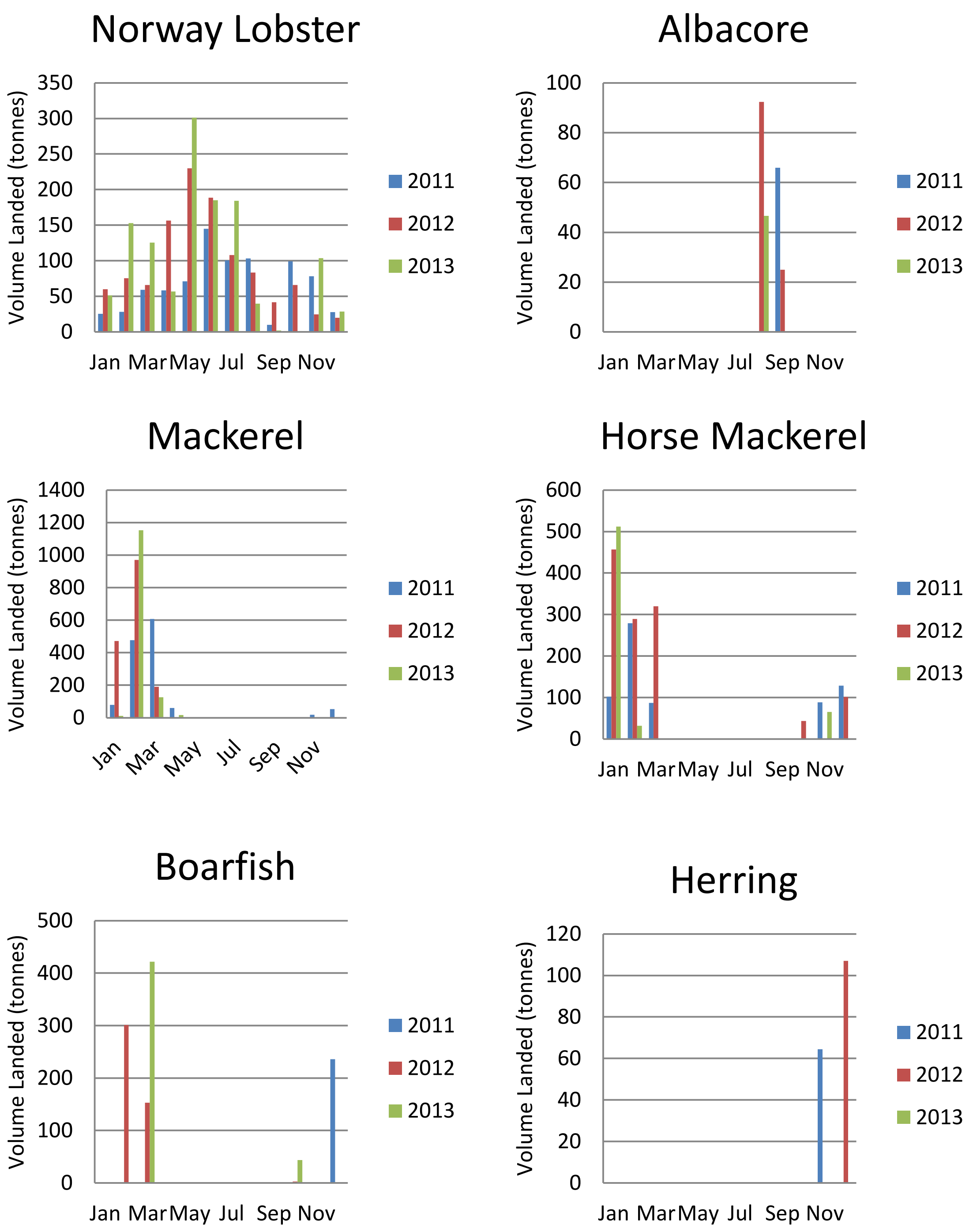

Figure 6: Monthly landings (tonnes) by species from Irish registered vessels to Ros an Mhíl from 2011-2013. Source: SFPA

4.1 Fisheries Infrastructure[14]

The harbour has the following four quays which are adequate to deal with the current level of activities associated with small to medium sized fishing vessels (Figure 7).

- No. 2 pier (solid) cargo quay, 98m long
- No. 2 pier (solid) fish landing quay, 215m long
- No. 1 (piled pier), 120m long
- Sean Céibh (wharf) at the eastern side of No. 2 quay, 70m long

The water depth is typically 3.7m, with one deep water berth of 5.8m on No.2 pier. There is a wet slip located along the Sean Ceibh adjacent to the new ferry terminal. This allows for the repair, maintenance and below waterline repairs to the fishing trawlers and statutory annual inspections of all the passenger ferry vessels.

Figure 7. Ros an Mhíl Harbour

Notes: 1. Pier 1, **2.** Pier 2, **3.** Galway and Aran Co-op / Auction Hall, **4.** Harbour Office, **5.** Ferry Boarding Facilities, **6.** Sea Angling / Charter Boat Boarding Facilities, **7.** Iasc Mara Teo, 8.Small Craft Harbour**, 9.** Car Park, **10.** BIM Ice Plant**, 11.** Ferry Offices, **12.** Old Auction Hall

[14] *Development of Business Plans for the Fishery Harbour Centres – Ros an Mhíl* (2009). Department of Agriculture, Fisheries and Food
Rossaveel Harbour Development – Deep Water Quay Land Use Zoning Study (2007). Mott McDonald Pettit Ltd. for Department of Communications, Marine and Natural Resources.

There is no deep water quay, which restricts entrance of bigger vessels. Planning permission for a deep-water quay providing 200m of berthage and 8m of depth was granted in 2002. This planning permission is valid until 2016 and will accommodate larger fishing and commercial vessels. Construction on this facility has yet to commence. Proposals were developed in 2007 to further extend the harbour including a 700m quay, further handling facilities, and bulk oil and petroleum storage facilities.

Major upgrading works to the Harbour Centre have recently been completed with the purpose of improving the land-based ferries transport and passenger infrastructure as well as providing modern finger pontoons for docking passenger ferries. The new ferry terminal was commissioned in May 2011 and comprises three floating finger piers capable of providing dedicated berthage for six passenger vessels of up to 40m in length.

In December 2012 a small craft harbour facility (marina) was completed capable of providing up to 35 – 40 berths for pleasure craft ranging in size from 5 to 17 meters.

Other facilities and properties in the harbour include the Harbour Master's Administration Building, the Sea Fisheries Protection Authority Office (owned by DAFM) and the ferry office / tourist office (also owned by DAFM). Costello Bay Coast Guard Unit is also located in a new Coast Guard building in Ros an Mhíl FHC. There is also a building housing the Harbour Masters workshop / store and an engineer's workshop / store. Galway and Aran Fishermen's Co-op (auction hall) and Iasc Mara Teo have premises in the harbour. BIM have an ice plant on a leased site at the harbour. There are a number of car parks in the harbour area. The old auction hall is used to store nets and other fishing gear (Figure 7).

4.2 Details of the Local Fishing Fleets

In 2011 there were 27 vessels in the Ros an Mhíl fleet employing an estimate 119 FTE. All vessels in the fleet are classed as polyvalent. The main species targeted were pelagics, (in particular mackerel and herring), nephrops, monkfish, megrim and whiting. Vessels within the ≥24m class targeted albacore tuna, nephrops, mackerel and monkfish. Main species for the smaller vessels, <10m, included lobster, crab, scallops and mixed whitefish as well as nephrops. The characteristics of the fleet segments landing into Ros an Mhíl in 2011 are shown in Table 14.

Table 14. The characteristics of the polyvalent fleet segments of the Ros an Mhíl fleet in 2011. Source: BIM

Segment (length class)	Number of vessels (2011)	Main Gear Type	Number of crew (average FTE per vessel)	Number of crew (total FTE per segment)	Main species	Main fishing locations (ICES areas)	Trip length (average days)
Polyvalent General LOA ≥ 24m	9	2 vessels drift and/or fixed nets, 5 vessels fishing pelagic gears, 2 vessels fishing demersal gears	8	72	mackerel, horse mackerel, nephrops, monkfish, albacore tuna	VIIb, VIIj, VIIc, VIIk	10

Polyvalent General 18m ≤ LOA < 24m	2	1 vessel fishing drift and/or fixed nets and 1 vessel fishing pelagic gears	6	12	nephrops, monkfish, megrim, haddock, whiting	VIIb, VIIc, VIIj	10
Polyvalent General 12m ≤ LOA < 18m	8	3 vessels fishing drift and/or fixed nets and 5 vessels fishing pelagic gears	4	28	nephrops, whiting, haddock, megrim, monkfish	VIIb	3
Polyvalent General 10m ≤ LOA < 12m	4	1 vessel fishing hooks, 1 vessel fishing demersal gear and 2 vessels fishing pots and/or traps	1	4	pollack, nephrops, thornback ray, haddock, whiting	VIIb	1.5
Polyvalent General LOA < 10	4	2 vessels fishing pelagic gears and 2 vessels fishing pots and/or traps	1	3	lobster, crab, scallops,nephrops, mixed whitefish	VIIb	1
Total	**27**			**119**			

The size of the Ros an Mhíl fleet (27 vessels) has remained relatively stable with a maximum fleet of 30 vessels and minimum of 25 between 2003 and 2011. Only two vessels did not fall into the DAFM segment of 'polyvalent general'. One of which was an >10m polyvalent potting vessel in 2009 and the other a 12m -18m specific vessel.

However, not only vessels that are based in Ros an Mhíl land into the port. In 2013, 48 vessels landed here. Over the years the number of vessels landing here has declined gradually with a maximum fleet of 58 vessels and minimum of 45 between 2008 and 2013. All vessels fall into the DAFM segment of 'polyvalent general'. The figures from hereon in will focus on the vessels landing into the port so as to show the activity generated here in the locality.Figure 8 presents the trends in fleet numbers since 2008 for the polyvalent general segment. Over the period the number of vessels in the 18-24m segment fell by 36%, with the large decline occurring due to decommissioning. All other segments have experienced declines except for the 10-12m segment. The >24 segment suffered a 24% decrease in number while the 12-18 segment declined by 9%. The number of <10m vessels registered in the region has increased over the last three years.

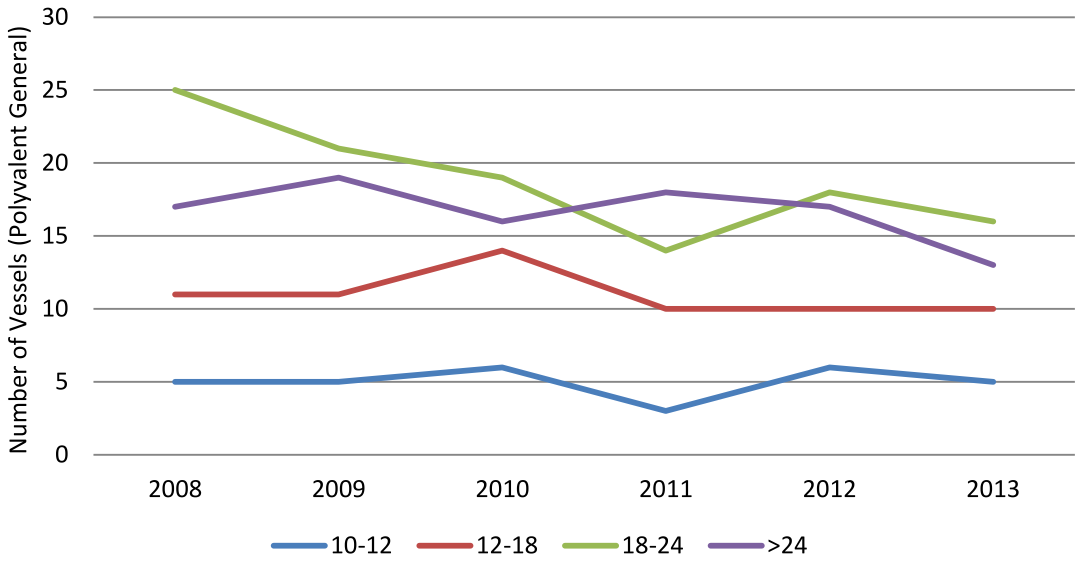

Figure 8. Number of vessels by vessel length (LOA) for the polyvalent general segment landing into Ros an Mhíl, 2008 - 2013. Source: BIM

Figure 9 illustrates the employment trends among the polyvalent sector which has followed the trend in vessel numbers. Over the period, FTE in 18-24m vessels fell by 20% while employment decreased in the 10-12m, the 12-18m and the 24-40m segments by 18%, 11% and 14% respectively.

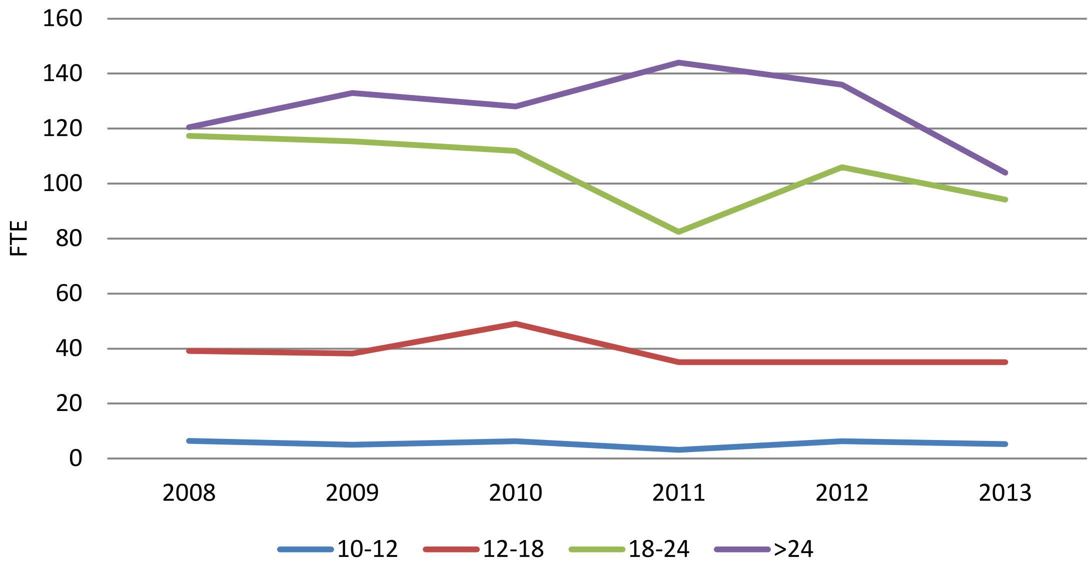

Figure 9. Employment (Full Time Equivalents, FTE) characteristics by vessel length for the polyvalent general segment landing into Ros an Mhíl, 2008 - 2013. Source: BIM

The age profile for those employed within the sector has been aging (Figure 10). From 2009 to 2010 there was an increase in the age profiles over 41 years. However, there is evidence of younger people entering the sector within the 16 – 25 age groups.

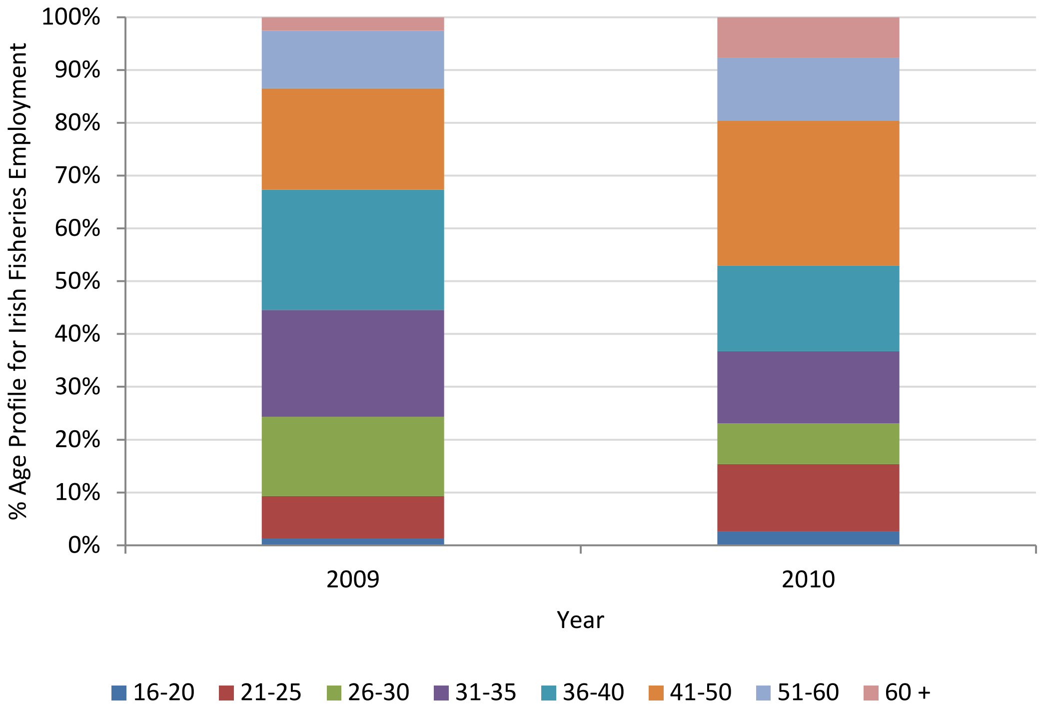

Figure 10. Age profile for Irish fisheries employment. Source: BIM

Engine power and gross tonnage have followed the fleet trends, generally decreasing for all vessel lengths with the exception of the 10 – 12m segment; see Figure 11 and Figure 12. Gross tonnage and engine power dropped within the 18 -24m vessels with decommissioning. For the 24 – 40m segment, tonnage and power declined also. For the smaller segments engine power has remained relatively stable over the time period.

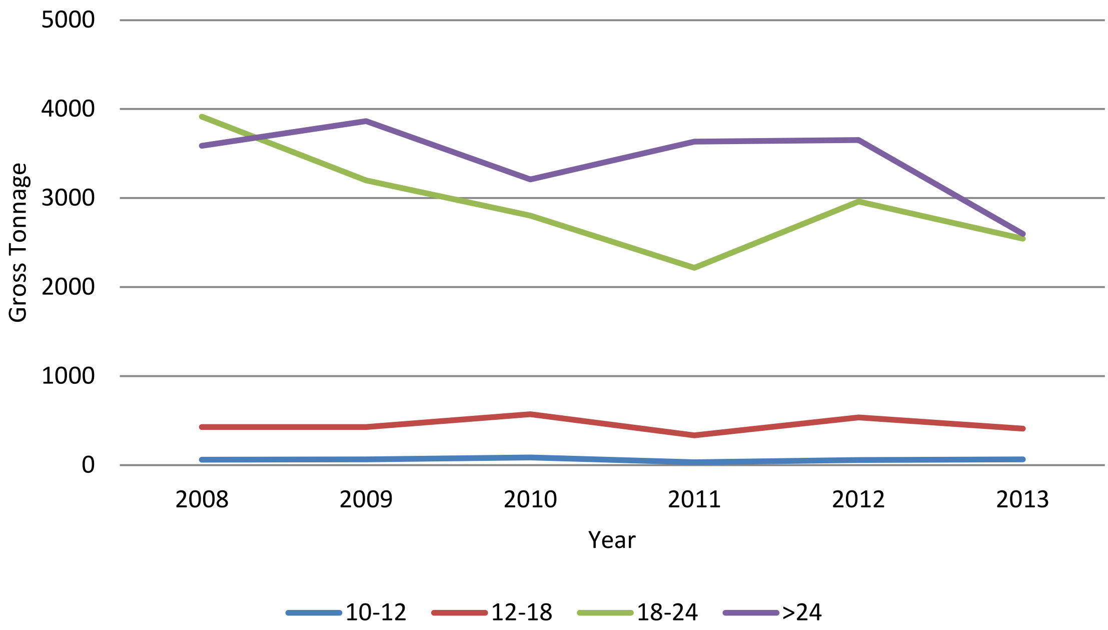

Figure 11. Gross tonnage (GT) by vessel length for the polyvalent general segment landing into Ros an Mhíl, 2008 - 2013. Source: BIM

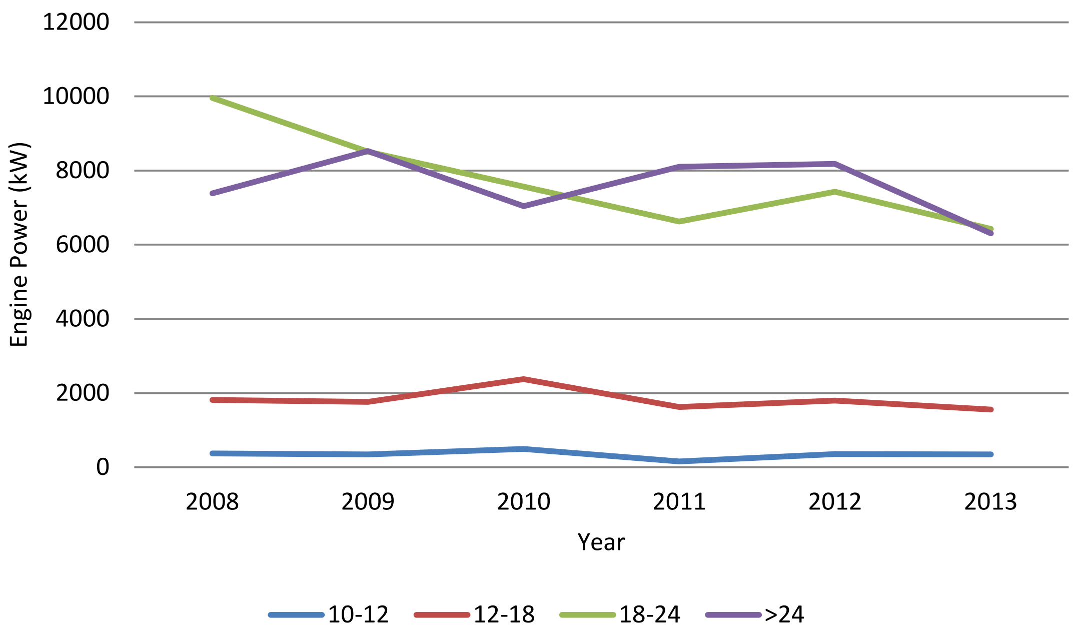

Figure 12. Engine power (kW) characteristics for the polyvalent general segment landing into Ros an Mhíl, 2008 - 2013. Source: BIM

4.3 Key Fish Stocks

The Ros an Mhíl fleet targets a range of pelagic, demeral and shellfish species as detailed in the previous section. Table 15 presents details of these species in terms of area of capture, management and state of the stocks.

Table 15. Management characteristics of the fish stocks harvested by the Ros an Mhíl fleet. Source: Marine Institute

Species Type	Stock	Management Area	Management Responsibility	ICES Stock Status	ICES Stock Area	Main Regulation
PELAGIC	Atlantic Mackerel	VI, VII, VIIIa, VIIIb, VIIId and VIIIe; EU waters of Vb; International waters of IIa, XII and XIV	EU	Full reproductive capacity	Northeast Atlantic	Quota
	Horse Mackerel	EU waters of IIa, IVa,VI, VIIa, VIIb, VIIc,VIIe,VIIf, VIIg, VIIj, VIIk, VIIIa, VIIIb, VIIId and VIIIe, EU and International waters of Vb, International waters of XII and XIV	EU	Undefined	IIa, IVa, Vb, VIa, VIIa, VIIb, VIIc,VIIe, VIIf, VIIg, VIIh, VIIk, and VII	Quota
	Atlantic Herring	VIIg (1), VIIh (1), VIIj (1) and VIIk (1)	EU	Full reproductive capacity	South of 52°30' N and VIIg,VIIh,VIIj and VIIk	Quota
	Atlantic Herring	VIIbc; VIaS (1)	EU	Reduced reproductive capacity. ICES advice for 2013 is there should be no catches of this stock unless a rebuilding plan is implemented.	VIa (South), VIIb and VIIc	Quota
	Atlantic Herring	Vb, VIaN (EU and International), VIb	EU	Above limit	VIa (North)	Quota
	Tuna Albacore	Atlantic Ocean North of 5° North	ICCAT/EU	F is above FMSY and Biomass is below BMSY	North Atlantic	Quota and vessel limit
PRAWNS	Norway Lobster	VII	EU	State of the stock is not precisely known	VII	Quota
	Norway Lobster	VI,EU and International waters of Vb	EU	State of the stock is unknown		Quota

WHITEFISH	Whiting	VI; EU waters of Vb; international waters of XII and XIV	EU	Insufficient information	VIb (Rockall)	Quota
	Whiting	VIIa	EU	State of stock unknown	VIIa	Quota
	Whiting	VIIb, VIIc, VIId, VIIe, VIIf, VIIg, VIIh and VIIk	EU	Full reproductive capacity	VIIe, VIIf, VIIg, VIIh, VIIi,VIIj, and VIIk	Quota
	Haddock	VIb(EU and International) XII and XIV	EU	Full reproductive capacity, harvested sustainabily	VIb	Quota
	Haddock	Vb and VIa (EU)	EU	Increased risk, harvested sustainably	VIa	Quota
	Haddock	VIIa	EU	State of the stock is unknown	VIIa	Quota
	Haddock	VIIb, VIIc, VIId, VIIe, VIIf, VIIg, VIIh,VIIj,VIIk, VIII, IX and X, EC waters of CECAF 34.1.1	EU	Undefined	VIIb, VIIc, VIId, VIIe, VIIf, VIIg, VIIh, VIIi, VIIj, VIIk	Quota
	Megrim nei	VII	EU	The stock was benchmarked in 2012 but the assesssment was accepted as trends only. State of stock is unavailable.	VIIb, VIIc, VIId, VIIe, VIIf, VIIg, VIIh, VIIj, VIIk and VIIIa,VIIIb,VIIId	Quota
	Megrim nei	VI; EU waters of Vb; International waters of XII and XIV	EU	Full reproductive capacity	IVa and VIa	Quota
	MonkFish	VII	EU	State of the stock is unknown	Anglerfish (*Lophius piscatorius* and *L. budegassa)* in Divisions VIIb, VIIc, VIId, VIIe, VIIf, VIIg, VIIh, VIIk and VIIIa,VIIIb, VIIId	Quota
	Monkfish	VI,EU waters of Vb;International waters of XII andXIV	EU	State of the stock is unknown	Anglerfish (*Lophius piscatorius* and *L. budegassa)* in Divisions IIIaand sub areas IV and VI	Quota
	Saithe	VII, VIII, IX and X; EU waters of CECAF 34.1.1	EU	Status of the stock unknown - no ICES advice	VII	Quota

	Saithe	VI; EU waters of Vb; EU and International waters of XII and XIV	EU Norway Management Plan	Full reproductive capacity	IV, IIa and VI	Quota
	Hake European	VI and VII; EU waters of Vb; International waters of XII and XIV	EU	Not available	IIIa, Subareas IV,VI and VII and Divisions VIIIa,VIIIb,VIIId	Quota
	Plaice	VI; EU waters of Vb; International waters of XII and XIV	EU	Status of stock in unknown. No ICES advice		Quota
	Plaice	VIIa	EU	Status of stock is unknown	VIIa	Quota
	Plaice	VIIb and VIIc	EU	Insufficient information	VIIb,VIIc	Quota
	Plaice	VIIf and VIIg	EU	Status of stock unknown	VIIf, VIIg	Quota
	Plaice	VIIh, VIIj and VIIk	EU	Status of stock unknown	VIIh, VIIi, VIIj, VIIk	Quota
	Rays nei	VIa,VIb,VIIa,VIIb,VIIc,VIIg,VIIj,VIIk		See attached advise		
	Cod Atlantic	VI:VB (EU), XII and IV (EU and International)	EU	Insufficient information	VIb	Quota
	Cod Atlantic	VIIb, VIIc, VIIe, VIIf, VIIg, VIIh, VIIj, VIIk, VIII,XI and X, EU waters of CECAF 34.1.1	EU	Full reproductive capacity	VIe, VIf, VIg, VIh, VIj, VIk	Quota
	Ling	EU and International waters of VI, VII, VIII, IX, X, XII and XIV	EU	State of the stock is unknown	Divisions IIIa and IVa and in Subareas VI, VII,VIII,IX,XII, and XIV	Quota
	Common Sole	VI; EU waters of Vb; International waters of XII and XIV		Status of Stock unknown - no ICES advice		
	Common Sole	VIIa	EU	Reduced reporductive capacity	VIIa	Quota
	Common Sole	VIIb and VIIc	EU	Insufficient information	VIIb,VIIc	Quota
	Common Sole	VIIf and VIIg	EU	Full reproductive capacity	VIIf,VIIg	Quota
	Common Sole	VIIh, VIIj, and VIIk	EU	Status of Stock unknown	VIIh, VIIj, VIIk	Quota

Table 16. Trends in Irish quota for species of importance to the Ros an Mhíl fleet. Source: BIM

Species type	Stock	Management Area	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
PELAGIC	Atlantic Mackerel	VI, VII, VIIIa, VIIIb, VIIId and VIIIe; EU waters of Vb; International waters of IIa, XII and XIV	66300	63216	46149	47894	54369	49643	66070	42947	54861	54956	57753	65275
	Horse Mackerel	EU waters of IIa, IVa,VI, VIIa, VIIb, VIIc,VIIe,VIIf, VIIg, VIIj, VIIk, VIIIa, VIIIb, VIIId and VIIIe, EU and International waters of Vb, International waters of XII and XIV	30693	31137	31454	31934	31996	39646	39179	40775	40439	40284	40803	29578
	Atlantic Herring	VIIbc; VIaS (1)	12727	12727	12727	14000	12600	10584	8467	6774	4065	3861	1364	3342
	Atlantic Herring	VIIg (1), VIIh (1), VIIj (1) and VIIk (1)	11235	11235	11236	9549	8117	6818	5115	8770	11407	18236	14864	19324
	Atlantic Herring	Vb, VIaN (EU and International), VIb	4432	4432	4447	5036	5036	4009	3187	3589	3286	3360	4151	4240
	Total Atlantic Herring		**28394**	**28394**	**28410**	**28585**	**25753**	**21411**	**16769**	**19133**	**18758**	**25457**	**20379**	**26906**
	Tuna Albacore	Atlantic Ocean North of 5°North		5216	5723	5679	8326	7958	6696	4356	3554	3896	2371	2699
PRAWNS	Norway Lobster	VII	6561	6436	7207	7928	9277	9277	9091	8273	8025	8025	8506	7740
	Norway Lobster	VI, EU and International waters of Vb	153	153	172	239	269	269	255	217	185	190	226	207
	Total Norway Lobster		**6714**	**6589**	**7379**	**8167**	**9546**	**9546**	**9346**	**8490**	**8210**	**8215**	**8732**	**7947**
WHITEFISH	Whiting	VIIb, VIIc, VIId, VIIe, VIIf, VIIg, VIIh and VIIk	8814	7507	6006	5544	5544	5544	4918	4565	4865	5298	6812	5328
	Whiting	VI; EU waters of Vb; International waters of XII and XIV	582	466	478	406	305	229	171	129	97	92	87	83
	Whiting	VIIa	288	296	296	252	213	160	120	91	68	52	49	46

Total Whiting		**9684**	**8269**	**6780**	**6202**	**6062**	**5933**	**5209**	**4785**	**5030**	**5442**	**6948**	**5457**
Haddock	VIIb, VIIc, VIId, VIIe, VIIf, VIIg, VIIh,VIIj,VIIk, VIII, IX and X, EU waters of CECAF 34.1.1	1819	2113	2560	2560	2560	2573	2573	2573	2959	3699	3144	2106
Haddock	Vb and VIa (EU)		1010	598	615	1037	995	576	438	328	985	690	653
Haddock	VIb(EU and International) XII and XIV		55	55	47	363	544	463	393	295	260	78	95
Haddock	VIIa							617	617	570	542	515	511
Total Haddock		**1819**	**3178**	**3213**	**3222**	**3960**	**4112**	**4229**	**4021**	**4152**	**5486**	**4427**	**3365**
Megrim nei	VII	2373	2996	3189	3029	3029	3029	3029	3029	3029	2878	2878	2878
Megrim nei	VI; EU waters of Vb; International waters of XII and XIV	565	466	373	373	373	336	363	399	439	439	439	528
Total Megrim		**2938**	**3462**	**3562**	**3402**	**3402**	**3365**	**3392**	**3428**	**3468**	**3317**	**3317**	**3406**
MonkFish	VII	1198	1584	1901	2005	2128	2128	2128	2447	2447	2325	2209	2540
Monkfish	VI,EU waters of Vb; International waters of XII and XIV	318	318	469	469	516	516	557	557	556	518	492	443
Total Monkfish		**1516**	**1902**	**2370**	**2474**	**2644**	**2644**	**2685**	**3004**	**3003**	**2843**	**2701**	**2983**
Saithe	VII, VIII, IX and X; EU waters of CECAF 34.1.1	2450	1960	1568	1333	1066	1066	1578	1525	1516	1516	1491	1491
Saithe	VI; EU waters of Vb; EU and International waters of XII and XIV	415	478	494	467	467	483	470	391	429	407	421	380
Total Saithe		**2865**	**2438**	**2062**	**1800**	**1533**	**1549**	**2048**	**1916**	**1945**	**1923**	**1912**	**1871**
Hake European	VI and VII; EU waters of Vb; International waters of XII and XIV	1114	1209	1318	1358	1629	1670	1593	1704	1704	1704	1704	2532
Plaice	VIIa	1173	876	1051	1051	1209	1209	1430	1063	1063	1063	1063	797

Plaice	VI; EU waters of Vb; International waters of XII and XIV	559	447	358	287	287	287	287	280	275	275	261	261
Plaice	VIIh, VIIj and VIIk	255	203	204	172	148	132	184	156	81	44	61	59
Plaice	VIIb and VIIc	128	144	128	115	98	88	75	64	62	62	63	63
Plaice	VIIf and VIIg	46	39	202	33	201	202	200	201	200	197	197	202
Total Plaice		**2161**	**1709**	**1943**	**1658**	**1943**	**1918**	**2176**	**1764**	**1681**	**1641**	**1645**	**1382**
Rays nei	EU waters of VIa, VIb,VIIa, VIIb, VIIc,VIIe, VIIf, VIIg, VIIh, VIIj and VIIk							2055	1747	1485	1294	1165	1048
Cod Atlantic	VIIb, VIIc, VIIe, VIIf, VIIg, VIIh, VIIj, VIIk, VIII,XI and X, EU waters of CECAF 34.1.1	875	824	849	0	775	753	825	825	825	1459	1479	1030
Cod Atlantic	VI:VB (EU), XII and IV (EU and International)	407	191	162	138	110	90	68	53	40	17	16	16
Total Cod		**1282**	**1015**	**1011**	**138**	**885**	**843**	**893**	**878**	**865**	**1476**	**1495**	**1046**
Ling	EU and International waters of VI, VII, VIII, IX, X, XII and XIV				1102	882	793	793	576	575	576	591	591
Common Sole	VIIh, VIIj, and VIIk	176	176	293	293	293	293	249	225	190	190	181	171
Common Sole	VIIa	123	98	117	117	99	90	80	73	73	67	58	41
Common Sole	VI; EU waters of Vb; International waters of XII and XIV	85	68	54	54	54	54	54	49	48	48	46	46
Common Sole	VIIb and VIIc	65	55	55	54	55	49	40	35	37	37	36	36
Common Sole	VIIf and VIIg	39	33	31	30	28	30	31	31	39	33	34	29
Total Common Sole		**488**	**430**	**550**	**548**	**529**	**516**	**454**	**413**	**387**	**397**	**355**	**323**

4.4 Details of the Local Catching Sector

The landings data show a number of trends (Table 17 and Figure 13):

- In 2013, the pelagic subsector accounted for 40% of landings volume but only 11% of landed value to Ros an Mhíl.
- The reverse is the case for nephrops which accounted for 25% of landings volume but 71% of landings value in 2013 making it by far the most valuable fishery to the area.
- Nephrops landings value has increased seven-fold since 2004, from €1,528,389 to €11,024,005.
- More noteworthy is the increase in the value of nephrops over the years 2012 and 2013. The value has increased by 93% since 2011. In this time period landings have increased by over 50% therefore there has been a notable increase in price aswell as in landings of nephrops.
- Demersal landings have also increased in 2012 and 2013 accounting for approximately 35% of total landings in 2013. The value of demersal landings decreased over the time series however in the last two years this has improved along with the increase in landings. Demersal landings accounted for 64% of total landings value in 2004 before falling to an average of 17% in the last years.
- Foreign fleets landed a small volume of fish in Ros an Mhíl, primarily demersal species, between 2003 and 2006.
- Landings of deep water species peaked in 2003. Landings of deepwater species have not surpassed one tonne since 2006.
- There are 205 vessels operating out of the small local harbours in the Ros an Mhíl hinterland. 91% of which are less than 10m.
- There are 27 vessels based in Ros an Mhíl employing 119 FTEs while 48 vessels landed into the port in 2013 employing an estimated 238 FTEs.

Table 17. The volume (tonnes) and value (€ '000) of catches from Irish registered vessels, non Irish registered vessels and all vessels landing into Ros an Mhíl from 2004 – 2013. Source: SFPA

Landings to Ros an Mhíl by Irish registered vessels										
VOLUME (tonnes)	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Demersal	1,505	1,125	874	832	615	818	753	859	1,216	1,756
Pelagic	2,766	8,168	2,606	1,417	2,619	2,493	2,743	2,241	3,139	2,003
Nephrops	595	789	650	952	719	610	824	806	1,120	1,232
Other Shellfish	47	24	22	10	9	8	12	15	7	16
Deepwater	44	50	9	1	1	1	0	0	1	9
Total volume	**4,957**	**1,0156**	**4,162**	**3,211**	**3,962**	**3,929**	**4,332**	**3,921**	**5,483**	**5,014**
VALUE (€ '000)										
Demersal	3,507	2,876	3,649	2,689	1,805	2,101	2,007	1,664	1,874	2,663
Pelagic	418	2,667	942	960	2,241	1, 739	1,271	2,635	2,901	1,779
Nephrops	1,528	4,440	4,840	5,595	4,330	2,703	4,279	5,701	8,331	11,024
Other Shellfish	127	58	34	39	39	29	34	50	20	40
Deepwater	69	73	22	2	1	0	0	1	0	6
Total Value (€ '000)	**5,649**	**10,114**	**9,486**	**9,285**	**8,416**	**6,572**	**7,592**	**10,052**	**13,126**	**15,512**

Landings to Ros an Mhíl by non-Irish registered vessels										
VOLUME (tonnes)	***2004***	***2005***	***2006***	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Demersal	*145*	*51*	*9*	0	0	0	0	0	0	0
Pelagic	*0*	*0*	*0*	0	0	0	0	0	0	0
Nephrops	*9*	*89*	*0*	0	2	0	0	0	0	0
Other Shellfish	*0*	*0*	*0*	0	0	0	0	0	0	0
Deepwater	*6*	*1*	*1*	0	0	0	0	0	0	0
Total volume	***160***	***141***	***10***	**0**	**2**	**0**	**0**	**0**	**0**	**0**
VALUE (€ '000)										
Demersal	*455*	*165*	*39*	0	1	0	0	0	0	0
Pelagic	*0*	*0*	*0*	0	0	0	0	0	0	0
Nephrops	*23*	695	*0*	0	11	0	0	0	0	0
Other Shellfish	*0*	*0*	*0*	0	0	0	0	0	0	0
Deepwater	8	2	1	0	0	0	0	0	0	0
Total Value	**486**	**862**	**40**	**0**	**11**	**0**	**0**	**0**	**0**	**0**

Landings to Ros an Mhíl by all vessels										
VOLUME (tonnes)	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Demersal	1,649	1,176	883	832	615	818	753	859	1,216	1,756
Pelagic	2,766	8,169	2,606	1,417	2,619	2,493	2,743	2,241	3,139	2,003
Nephrops	604	878	650	952	722	610	824	806	1,120	1,232
Other Shellfish	47	24	23	10	9	8	12	15	7	16
Deepwater	50	51	10	1	1	1	0	0	1	9
Total volume	**5,117**	**10,297**	**4,172**	**3,211**	**3,965**	**3,929**	**4,332**	**3,921**	**5,483**	**5,014**
VALUE (€ '000)										
Demersal	3,962	3,014	3,688	2,728	1,805	2,101	2,017	1,664	1,874	2,663
Pelagic	418	2,667	942	960	2,241	1,739	1,271	2,635	2,901	1,779
Nephrops	1,552	5,135	4,840	5,595	4,340	2,703	4,279	5,701	8,331	11,024
Other Shellfish	127	58	34	39	39	29	34	50	20	40
Deepwater	77	75	23	2	1	0	0	1	0	6
Total Value	**6,135**	**10,976**	**9,526**	**9,285**	**8,427**	**6,572**	**7,592**	**10,052**	**13,126**	**15,512**

Table 17 above, presents the landed volumes and values from Irish and foreign vessels landing into Ros an Mhíl. Almost all landings to Ros an Mhíl are by the Irish fleet. Foreign fleets landed a small volume of fish, primarily demersal species, between 2003 and 2006. The maximum landings by foreign vessels accounted for 3.5% of total landings in 2004 and 8.9% of the landings value in 2005. There have been no foreign landings of fish to Ros an Mhíl since 2006 partly due to physical harbour restrictions on size and type of vessel permitted.

Pelagics account for the highest volume of species landed in any given year in Ros an Mhíl. Figure 13 shows the dominance of pelagic landings into Ros an Mhíl. The pelagic vessels also land their catch in other ports, for example mackerel is caught off the Shetlands by Ros an Mhíl's pelagic vessels which is landed and sold to processors in Scotland.

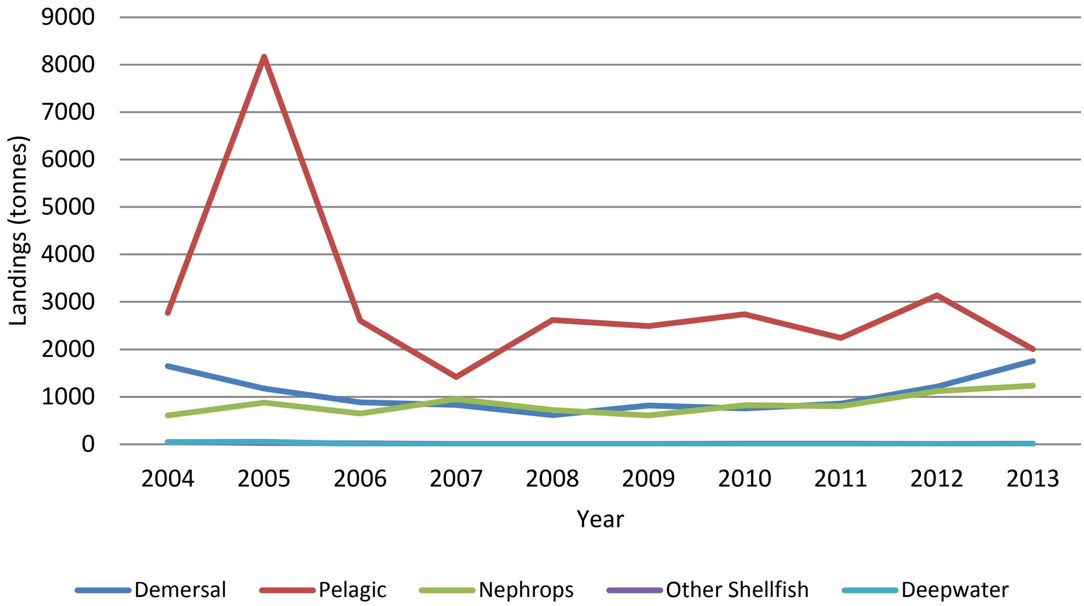

Figure 13. Trends in the volume of landings by species group to Ros an Mhíl 2004 - 2013. Source: SFPA

Despite the high volume of pelagic species, in monetary terms nephrops are the most valuable species landed accounting for approximately 71% of the total landings value in 2013 (Table 17). Figure 14 shows the value of landings into Ros an Mhíl. Nephrops are the most valuable species; their value increasing seven-fold since 2004. The value of pelagic species experienced a dip in 2006 and 2007, but then increased to more stable levels again in 2008. Demersal whitefish landings value has remained relatively stable over the years and increasing in the last two, but has declined in terms of total landings value from 64% in 2004 to 17% in 2013.

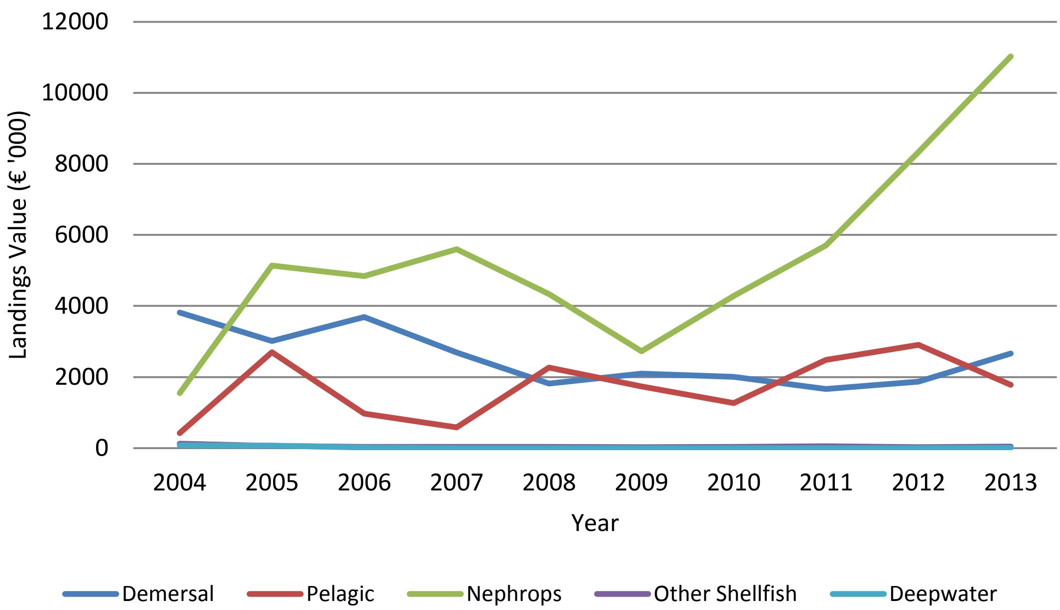

Figure 14. Trends in the value (€ '000) of landings by species group to Ros an Mhíl from 2004 - 2013. Source: SFPA

In Table 18 below the historical landings into Ros an Mhíl are shown by species from the year 2004 until 2013. Nephrops landings dominate the value generated in the port for this year followed by mackerel, monkfish, whiting and horse mackerel. Positive trends in landings can be seen for nephrops, whiting, haddock and boarfish, landings are stable for mackerel, monkfish and megrim, while landings for horse mackerel have been very variable over the last three years.

Table 18. Landings (tonnes) by species made by Irish registered vessels to Ros an Mhíl from 2004 – 2013. Source: SFPA

VOLUME (tonnes)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2013 VALUE
Nephrops	595	789	650	952	719	610	824	806	1120	1232	€11,024,005
Mackerel	1128	3689	1503	760	1536	1363	1381	1296	1632	1305	€1,180,263
Monkfish	188	258	343	274	160	171	223	187	191	213	€811,754
Whiting	84	44	29	79	43	77	85	109	205	566	€657,154
Horse Mackerel	119	3310	532	317	640	571	1095	815	1258	651	€423,150
Haddock	129	84	54	86	83	136	79	84	107	194	€288,072
Megrim	243	155	118	114	79	130	153	77	78	83	€196,969
Sole Black	31	18	16	17	21	25	14	8	22	19	€176,829
Tuna	0	0		32	228	200		66	118	47	€175,118
Hake	77	62	64	45	33	59	54	69	50	56	€132,244
Boarfish	13	138	0	5		4		237	458	466	€73,938
Cod	1	17	6	5	6	7	6	5	8	29	€67,884
Ray	177	101	84	77	93	82	53	29	26	30	€51,466
Witch	105	58	41	16	14	21	23	20	23	24	€42,804
Ling	85	59	26	14	9	14	13	9	10	22	€31,984
Turbot	17	4	11	16	12	11	5	3	5	4	€30,194
Squid	20	9	3	2	2	3	9	4	3	10	€26,558
Pollack	37	4	3	4	7	10	4	9	3	14	€25,591
Brill	8	5	5	10	9	10	6	2	4	3	€17,138
Saithe	32	24	12	2	0	1	0	1	15	8	€11,596
John dory	23	8	8	5	3	7	3	0	1	2	€11,130
Plaice	20	10	11	11	12	12	7	4	6	7	€10,663
Crab	18	4	3	6	5	3	3	3	1	5	€7,074
Lobster		0	0	1	2	2	0	0	1	1	€6,772
Lemon Sole	12	5	2	4	2	5	2	1	1	3	€5,379
Other Whitefish	236	210	40	52	28	39	22	242	463	479	€202,484
Other Shellfish	9	11	16	0	0	0	0	8	3	0	€0
Other Pelagics	1518	1169	570	309	214	359	267	64	131	0	€151
Deepwater	44	50	9	1	1	1	0	0	1	9	€5,611
Total	**4970**	**10294**	**4162**	**3216**	**3962**	**3933**	**4332**	**4158**	**5940**	**5480**	**€15,511,975**

Price trends for selected species are shown in Table 19. Pelagic prices have fluctuated over the last 8 years and are currently at a similar level than the start of the timeseries. Whitefish price trends are all negative over the years. Peak prices were achieved for all whitefish species from 2006 – 2008 and have fallen since. The price for crab marginally decreased up unitl 2012 however in 2013 average prices dropped by around 33%. The price for nephrops has fluctuated over the time series for both Whole Prawns and Prawn tails. In 2012 and 2013 the price for Whole Prawns has fallen from the historical high of 2011 however still remains higher than the time series average. Prawn tails are at historical highs for 2012 and 2013. Additionally, frozen prawns have been generating average prices per kilo of €8.77 and €8.04 for the years 2012 and 2013 respectively. Frozen prawns accounted for over 40% of recorded sales in the Galway and Aran Co-op for these years and hence can explain the strong increase in revenue generated by the nephrops fishery in Ros an Mhíl of late.

Table 19. Price trends for selected species at Ros an Mhíl, 2004 - 2011, price per kg. Source: Galway & Aran Co-op

	2006	2007	2008	2009	2010	2011	2012	2013
Pelagic								
Mackerel	€0.84	€0.63	€0.47	€0.52	€0.64	€0.94	€1.04	€0.85
Herring	€0.29	€0.22	€0.25	€0.27	€0.27	€0.48	€0.53	€0.28
Sprat	€0.18	€0.22	€0.17	€0.25	€-	€0.50	€-	€0.20
Horse mackerel	€0.20	€0.21	€0.35	€0.37	€0.34	€0.54	€-	€-
Tuna (albacore)	€-	€1.96	€2.37	€1.53	€2.35	€1.99	€1.97	€1.81
Whitefish								
Cod	€4.18	€4.07	€3.29	€3.96	€3.75	€3.25	€2.79	€3.32
Haddock	€1.21	€1.44	€1.36	€1.35	€1.53	€1.67	€1.03	€1.09
Whiting (round)	€1.04	€1.15	€1.16	€1.02	€0.79	€0.88	€0.88	€0.79
Whiting(gutted)	€1.45	€1.69	€1.54	€1.47	€1.42	€1.32	€1.43	€1.29
Hake	€2.15	€2.54	€3.01	€2.46	€1.46	€2.29	€2.44	€2.05
Monkfish	€4.63	€4.32	€4.42	€3.99	€3.95	€3.82	€3.34	€3.47
Megrim	€2.48	€2.25	€2.28	€1.48	€1.76	€2.48	€2.10	€2.08
Plaice	€1.23	€1.41	€1.19	€1.27	€1.30	€1.07	€1.08	€1.14
Sole (Black)	€17.56	€18.84	€18.13	€12.48	€13.70	€13.60	€10.56	€11.24
Pollack (White)	€2.20	€2.24	€2.42	€1.86	€2.17	€2.06	€2.08	€1.85
Shellfish								
Crab	€2.03	€2.03	€1.97	€1.85	€1.85	€1.81	€1.97	€1.39
Whole Prawns	€7.06	€6.76	€4.45	€3.28	€5.61	€7.53	€5.92	€5.90
Prawn tails	€5.81	€6.32	€5.48	€3.42	€3.70	€5.10	€6.70	€6.41

The key species landed along with their main markets and product forms is shown in Table 20. The main markets for species landed into Ros an Mhíl include local processors for pelagics, the domestic market, Spain, France, Netherlands and the UK.

Table 20. The main markets and product form for species landed into Ros an Mhíl. Source: Galway & Aran Co-op

Species	Main Markets	Main Product Form
Monkfish	Spain and Ireland	100% chilled, gutted and tails
Hake	Local and Spain	Fresh, chilled
Megrim	Spain	Chilled gutted
Whiting	Local, Ireland	Fresh, chilled
Haddock	Domestic	Fresh, chilled
Tuna	Spain and France	Chilled to canning industry
Mackerel	Local and Donegal	Fresh, chilled
Herring	Local, South Ireland and Donegal	Fresh
Sprat	Killybegs	For processing
Horse Mackerel	Local and Donegal	Fresh, chilled
Prawns (whole)	Ireland, Spain and Netherlands	Whole (fresh and frozen)
Prawn tails	Ireland, UK and Northern Ireland	Tails, fresh and frozen

4.4.1 The Hinterland Fisheries

There are 205 vessels operating out of the small local harbours in the Ros an Mhíl hinterland (Figure 15, Table 21). The majority of vessels, 91% are less than 10m, of which 64% are polyvalent general and 27% are polyvalent potting. The remaining 9% of vessels are less than 12m; 3 are specific (1.5%) targeting clams and razors, 2 (1%) are in the polyvalent potting sector and 12 (6%) in the polyvalent general. Table 21 details the fleet for each small harbour. In certain cases harbours, such as Ballyconneely and Roundstone, are grouped together due to vessels landing into either harbour.

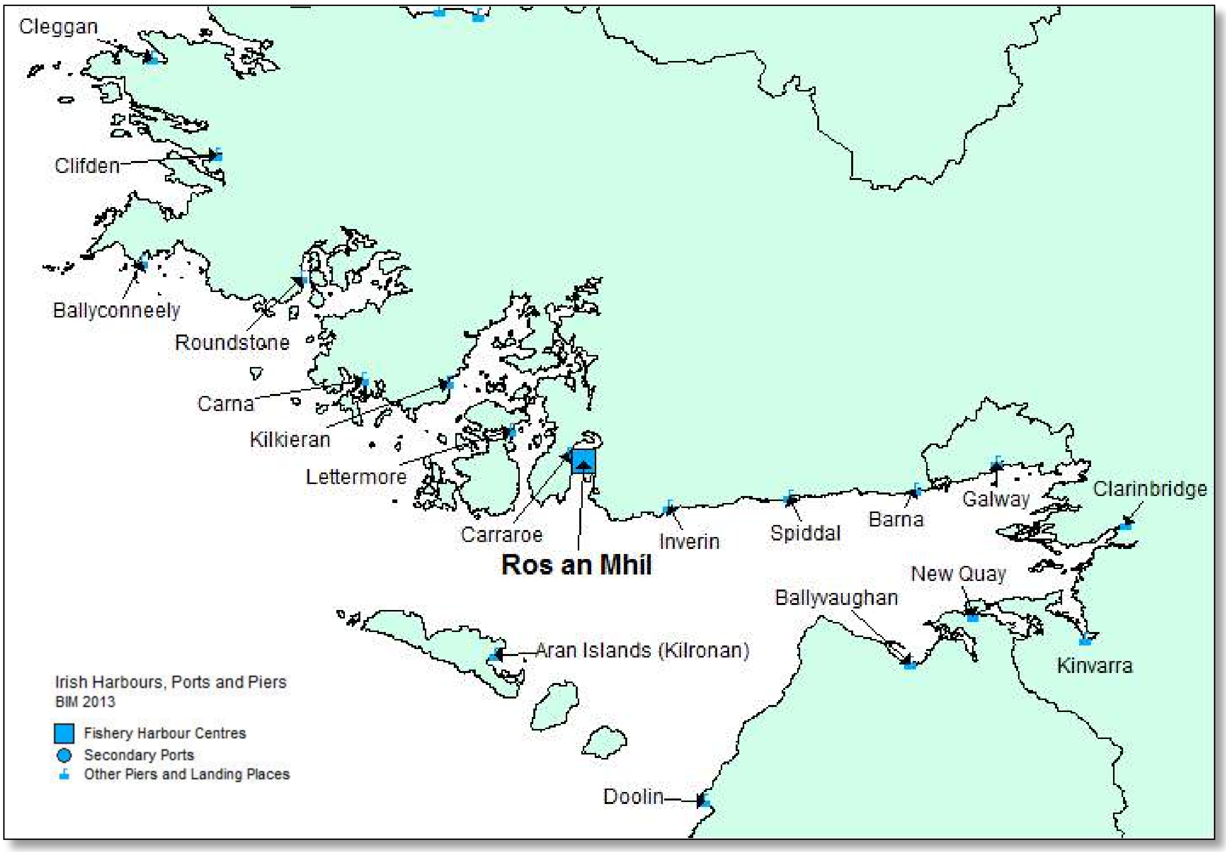

Figure 15. Location of small local harbour/piers in the Ros an Mhíl hinterland

The species targeted by the inshore fleet include: crab, lobster, velvet crab, shrimp, crayfish, pollack and some oyster and scallops. The specific vessels fish clams and razors. The majority of landings are exported to Spain and France.

Fishing is subject to season depending on species targeted and weather conditions. From Galway Bay, lobsters are fished throughout the year; pots are hauled twice a week during the summer months and almost weekly during the winter. In 2012, shrimp were fished from the beginning of September to the end of December. Inner Galway Bay vessels fish off the coast of Galway from Slyne Head to Black Head including the Aran Islands. Days at sea per annum vary from 70 to over 200 depending on the weather and the species fished. The vessels in Aran however have a shorter season due to weather, starting in March / April and finishing in September/October. Vessels from Carna fish off the west coast of Galway with a season generally running from March until the end of the year.

Table 21. The characteristics of the fleet landing into small local harbours of Aran Islands, Cleggan, Clifden, Ballyconneely / Roundstone, Carna, Lettermore / Carraroe, Galway Docks and Inner Galway Bay. Note: Some harbours, such as Ballyconneely and Roundstone, are grouped together due to vessels landing into either harbour. Source: BIM

Harbour	Segment	Number of Vessels	Main Species
Aran Islands	Polyvalent Potting LOA < 10m	9	Lobster, crab
	Polyvalent General LOA < 10m	20	Lobster, pollack, crab
	Polyvalent General 12m ≤ LOA < 18m	1	Lobster, crab, pollack, crayfish
Cleggan	Polyvalent Potting <10m	8	Lobster, crab
	Polyvalent General <10m	6	Lobster, crab shrimp, mackerel
	Polyvalent General 10m ≤ LOA < 12m	1	Crab, lobster
Clifden	Polyvalent Potting <10m	3	Lobster, shrimp
	Polyvalent General <10m	2	Potting
	Specific 10m ≤ LOA <12m	2	Clams, razors
Ballyconneely /Roundstone	Polyvalent Potting LOA < 10m	12	Lobster, crab, shrimp, velvet crab
	Polyvalent General LOA < 10m	19	Lobster, crab, pollack, crayfish, shrimp, oysters
	Polyvalent General 10m ≤ LOA < 12m	2	Gillnetting, crayfish
Carna	Polyvalent Potting LOA < 10m	6	Lobster, crab
	Polyvalent General LOA < 10m	37	Lobster, shrimp, crab, oysters, scallops
	Polyvalent General 10m ≤ LOA < 12m	2	Lobster, crab, crayfish, scallop
	Polyvalent General 12m ≤ LOA < 18m	1	Lobster, crab, trawling
	Aquaculture LOA < 10m	7	Oysters
	Aquaculture 10m ≤ LOA < 12m	2	Oysters
Lettermore/Carroroe	Polyvalent Potting <10m	3	Lobster, crab, shrimp
	Polyvalent General <10m	24	Lobster, crab, velvet crab, crayfish, shrimp, oyster
	Polyvalent General 10m ≤ LOA < 12m	1	Trawling

Galway Docks	Polyvalent Potting <10m	4	Shrimp, lobster,
	Polyvalent Potting 10m ≤LOA <12	1	Shrimp
	Polyvalent General <10m	3	Shrimp, lobster, pollack
	Polyvalent General 10m ≤ LOA < 12m	2	Shrimp, oyster, scallops
Inner Galway Bay/North Clare	Polyvalent Potting <10m	1	Lobster
	Polyvalent General <10m	14	Lobster, crab, shrimp, velvet crab
	Specific 10m ≤ LOA <12m	1	Clams, razors
	Aquaculture LOA < 10m	10	Oysters
	Aquaculture 10m ≤ LOA < 12m	1	Oysters
TOTAL	**Polyvalent Potting <10m**	**46**	
	Polyvalent Potting 10m ≤ LOA < 12m	**1**	
	Polyvalent General <10m	**125**	
	Polyvalent General 10m ≤ LOA < 12m	**8**	
	Polyvalent General 12m ≤ LOA < 18m	**2**	
	Specific 10m ≤ LOA <12m	**3**	
	Aquaculture LOA < 10m	**17**	
	Aquaculture 10m ≤ LOA < 12m	**3**	
	Overall	**205**	

4.5 Details of the Local Processing Sector

The processing sector employed 56 FTE staff in 2011 and contributed almost €22m in turnover to the local economy. There are four processors based in Ros an Mhíl:

- Iasc Mara Teo: the company specialises in processing pelagic species especially herring and mackerel. All their fish is sourced from Irish owned vessels, mainly operating out of Ros an Mhíl but also landing into other ports. 95% of their products are exported.
- Galway and Aran Fishermen's Co-op: sells to processors and wholesalers in export markets. 35% of sales are generated on the home market and 65% on exports.
- Breizon Teo: specialise in live shellfish, crustaceans, processed crab, shrimp products and smoked organic fish products. 95% of sales are generated through the export market.
- Flemings Seafoods: is a small processing company with two strands to the business; home deliveries of frozen fish and wholesale frozen prawn deliveries. The business is focussed 100% on the domestic market.

Table 22. Examples of product form and markets for the processing sector based in Ros an Mhíl. Source: Ros an Mhíl Economic Survey

Species	Main Markets	Product Form
Herring	Europe and Eastern Europe	Marinated skin-on fillets
Herring	Europe and Eastern Europe	Rollmops
Herring	Europe and Eastern Europe	Frozen fillets
Herring	Europe and Eastern Europe	Deli herring
Herring	Europe and Eastern Europe	Fresh fillets
Mackerel	Eastern Europe, Africa, Middle East and Asia	Frozen whole
Mackerel	Eastern Europe, Africa, Middle East and Asia	Frozen flaps
Mackerel	Eastern Europe, Africa, Middle East and Asia	Frozen headed and gutted
Horse Mackerel	North Africa	Fresh whole
Horse Mackerel	North Africa	Frozen whole
Sprat	Europe	Frozen
Lobsters	European market	Fresh and Frozen
Mussels	European market	Fresh and Frozen
Oysters	European market	Fresh and Frozen
Shrimp	European market	Fresh and Frozen
Winkle	European market	Fresh and Frozen
Crab	European market	Fresh and Frozen
Prawns	Domestic market	Peeled and frozen
Selection of fish processed for home deliveries	Galway region	Frozen

Most local vessels sell their catch via the co-op. Processors are highly dependent on local landings, with most fish purchased from vessels operating out of Ros an Mhíl. At times local vessels will land into other harbours, such as Ringaskiddy, the fish then being transported back to Ros an Mhíl for sale or processing. Pelagics, Nephrops and whitefish are sourced locally from Ros an Mhíl while other shellfish are sourced from Ros an Mhíl and its hinterland[15].

Table 22 presents some of the product forms and markets for the processing sector based in Ros an Mhíl. Large amounts of the processed pelagic species are exported to Eastern and Continental Europe. These product forms include frozen flaps, frozen fillets, deli herring and rollmops. Fresh and frozen horse mackerel is exported to North Africa. Shellfish including mussels, oysters, winkles and crustaceans – crab and lobster – are exported to European markets, mainly Spain and France. Products are also processed for the local/domestic market including prawns, salmon, lemon sole, and whitefish. Pelagics and shellfish represent the most important sectors for value added in Ros an Mhíl. Annual turnover for the processing subsector and employment from 2004 to 2011 is presented in Table 23. Between 2004 and 2011, turnover dropped to its lowest level in 2009, a decrease of 24.6% compared to 2004. Processing has since made a recovery with 2011 figures marginally above 2004 figures, showing a 0.17% increase.

Table 23. Annual turnover of companies in the processing subsector and employment from 2004 - 2011. Source: Ros an Mhíl Economic Survey

	2004	2005	2006	2007	2008	2009	2010	2011
Turnover								
€ ‘000	21,789	25,159	20,858	20,401	17,854	16,430	18,578	21,827
Employment								
Full Time	49	47	37	30	32	29	26	30
Part Time	62	57	45	29	24	29	29	51
Casual	2	2	2	2	2	7	10	2
FTE	80.5	76	60	45	44.5	45.25	43	56

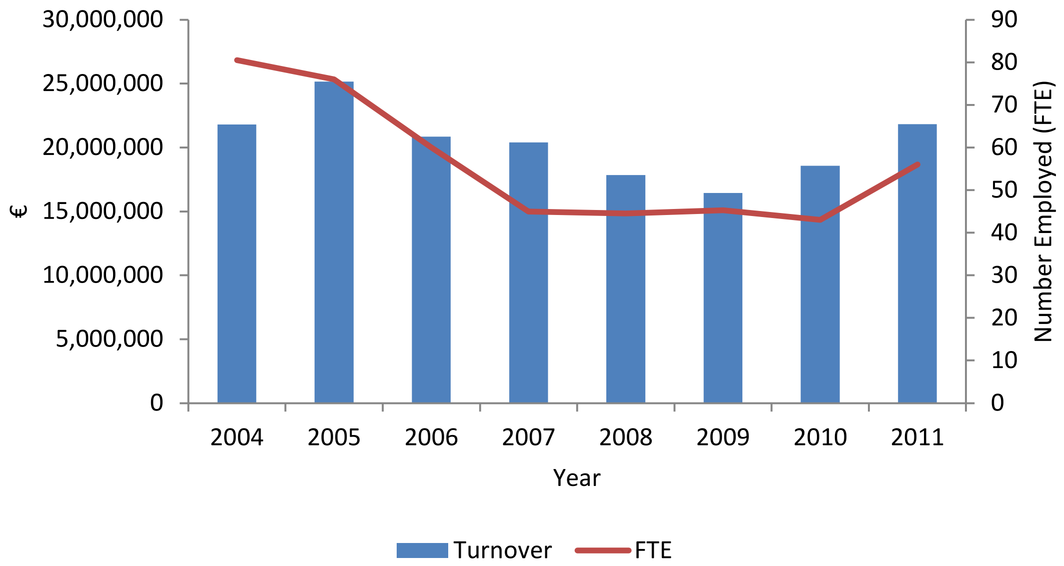

Figure 16. Trend between turnover and FTE 2004 – 2011 in the Ros an Mhíl processing sector. Source: Ros an Mhíl Economic Survey

[15]Only a small amount of fish is imported – lemon sole from Iceland, farmed sea bass and sea bream from Greece.

The changes in employment are correlated with changes in turnover, illustrated in Figure 16. Employment has steadily dropped from 2004 to 2010, with 2011 showing slight upward trends corresponding to the upward trend in turnover. Between 2004 and 2011 full time equivalent employment fell by 30.4%. FTE employment has increased by 23% from 2010 to 2011.

4.6 Details of the Local Aquaculture Sector

The aquaculture sector in Ros an Mhíl and its hinterland is dominated by shellfish production. In the hinterland area between Cleggan, Co. Galway and Doolin, Co. Clare there are up 20 aquaculture companies producing shellfish. *Pacific* oysters are produced in Co. Clare as well as relatively small amounts of clam, scallop and rope mussel. In addition Pacific oysters, King Scallops and Manila clam spat are also produced in the area for sale to on-growing operations. Native and *gigas* oyster production are significant industries in Co. Galway. Salmon production dominates sites in North and South Connemara particularly Mannin Bay near Clifden and Kilkieran bay just outside Ros an Mhíl.

Finfish production in the area is significantly greater in terms of volume and value than shellfish production although there are considerably less producers. In 2011 the volume of finfish produced in the Ros an Mhíl hinterland was 2,513 tonnes with an estimated value of €16.37 million. The volumes and value of finfish produced in the area fluctuated greatly between 2003 and 2008 but have remained relatively stable since (Table 24) but at a considerably lower level than in 2003/2004. The levels of salmon farming have contracted over the years from a peak in 2000. The reasons for this are complex and include disease incidence, falling salmon prices due to cheaper imports and rationalisation of the sector. However on a positive note, an increasing proportion of Irish salmon is now achieving either organic or eco-friendly status and with these standards an associated price premium is being achieved[16]. In 2012 a company called Bradán Beo Teo consolidated a number of salmon farms in Kilkieran Bay to produce certified organic salmon.

Table 24. The volume, value and FTE employment of aquaculture production Ros an Mhíl and its hinterland 2004 - 2011. Source: BIM Annual Aquaculture Production and Employment Survey, Aquaculture Division

VOLUME (tonnes)	2003	2004	2005	2006	2007	2008	2009	2010	2011
Finfish	6,790	5,756	2,646	5,900	6,670	2,669	3,185	2,812	2,513
Shellfish	587	638	733	475	927	944	736	632	621
Total	**7,377**	**6,394**	**3,379**	**6,375**	**7,597**	**3,613**	**3,921**	**3,444**	**3,134**

VALUE (€ '000)	2003	2004	2005	2006	2007	2008	2009	2010	2011
Finfish	18,967	20,967	11,525	26,639	32,104	14,420	18,470	16,240	16,370
Shellfish	1,133	1,544	1,873	1,091	1,897	1,875	1,932	2,246	2,035
Total	**20,100**	**22,511**	**13,398**	**27,730**	**34,001**	**16,295**	**20,402**	**18,486**	**18,405**

[16] BIM, 2007. *Status of Irish Aquaculture.*

FTE	2003	2004	2005	2006	2007	2008	2009	2010	2011
Shellfish FTE					53	58	121	121	94
Finfish FTE					53	53	52	57	50
Total FTE					106	111	173	178	144

In 2011 the shellfish sector produced 621 tonnes of shellfish, valued at €2.04 million. The volumes of shellfish produced in Ros an Mhíl and its hinterland has remained relatively stable apart from a decline in 2006. The value of shellfish production has been increasing steadily over the years of the study period.

In terms of employment, the finfish farming sector averaged 53 FTE jobs from 2009 – 2011 and the shellfish sector 89 FTE jobs over the 5 year period 2007 – 2011 with an average of 140 casual jobs for the wider region.

As the hinterland area for this study stretches from Cleggan, Co. Galway to Doolin, Co. Clare a more detailed look at the aquaculture sector in the immediate area of Ros an Mhíl was undertaken (Table 25). Within this area a small scale abalone farm, specialising in growing the premium Japanese species known as Ezo employs approximately 2 FTE in Ros an Mhíl. Native oysters, scallops and salmon are produced in Kilkieran Bay nearby. In 2012 a number of salmon farms were consolidated into one company, Brandon Beo Teo to revitalise the industry and produce organic salmon in Kilkieran bay.

Finfish aquaculture constitutes the highest value in terms of volume and value (Table 25) in the immediate area of Ros an Mhíl. In employment terms, the finfish farming sector employment has fallen over the years and in 2011 employed 13 FTE. Employment in the shellfish sector has also fallen but to a lesser extent and in 2011 employed 16 FTE. A large proportion of employment in the sector, in particular shellfish, is casual employment. In 2011 the shellfish sector within the immediate area had 81 casual employees.

Table 25. The volume, value and FTE of the aquaculture subsector for Ros an Mhíl area, 2003 – 2011. Source: BIM Annual Aquaculture Production and Employment Survey, Aquaculture Division

VOLUME (tonnes)	2003	2004	2005	2006	2007	2008	2009	2010	2011
Finfish	6,064	5,045	1,963	5,106	5,802	2,000	2,099	1,200	850
Shellfish	33	64	50	38	76	19	19	40	35
Total	**6,097**	**5,109**	**2,013**	**5,144**	**5,878**	**2,019**	**2,117**	**1,240**	**885**

VALUE (€ '000)	2003	2004	2005	2006	2007	2008	2009	2010	2011
Finfish	17,121	18,533	7,804	22,166	26,820	9,680	11,964	6,000	5,600
Shellfish	131	246	200	170	234	60	60	129	140
Total	**17,252**	**18,779**	**8,004**	**22,336**	**27,055**	**9,740**	**12,024**	**6,129**	**5,740**

FTE	2003	2004	2005	2006	2007	2008	2009	2010	2011
Finfish	45	14	28	41	38	24	24	15	13
Shellfish	26	26	26	20	20	20	20	17	16
Total	**71**	**40**	**54**	**61**	**58**	**44**	**44**	**32**	**29**

4.7 Details of the Local Ancillary Sector

Most ancillary services for the Ros an Mhíl fleet are located outside of the area. Hydraulic, engineering and cold store services are located on the outskirts of Galway City. Further ancillary services such as net making and chandlers are located in the areas surrounding Ros an Mhíl. For larger repairs many vessels travel to Killybegs or Cork.

Ancillary services located in Ros an Mhíl include chandlery, net repair, light engineering, harbour services and the ice plant. Fuel is supplied by Galway and Aran Co-op. Table 26 presents an estimated total ancillary turnover of €2.2 million in 2011 for the companies identified within the ancillary sector in Ros an Mhíl. Turnover and employment would be significantly greater if businesses outside of the harbour centre were taken into account. A large proportion of turnover is attributable to fuel supplies.

Table 26. Annual turnover and employment (FTE) in the ancillary subsector of Ros an Mhíl from 2004 - 2011. Source: Ros an Mhíl Economic Survey

	2004	2005	2006	2007	2008	2009	2010	2011
Turnover (€ '000)	2,219	2,387	2,032	2,607	2,167	1,916	1,911	2,223
Employment (FTE)	6	6	6	6	6	5	5	5

Other businesses are also dependent on fishing businesses for trade. These include the local supermarket for supplying food for fishing crews. These figures are accounted for in the earlier section of the report outlining other sectors in the area.

5. Governance

5.1 Key Local Institutions

Galway and Aran Co-Op

Galway and Aran Co-op was established in 1974. It acts as an agent / broker on behalf of the fishermen and sells pelagic, white fish and shellfish. Approximately 35% of sales are generated through the homemarket and 65% through exports[17]. They also sell fuel.

Iasc Mara Teo

Iasc Mara Teo is an Irish owned fish processing company located in Ros an Mhíl. The company specialises in processing pelagic species especially herring and mackerel. It is Ireland's biggest exporter of marinated herring products.

Island Ferries Teo

The company offers daily ferry sailings from Ros an Mhíl to all of the three islands with a fleet of five vessels that vary in passenger capacity to accommodate private charter as well as scheduled sailings. They have a number of offices based in Galway. The company also provide bus connection services from the city centre to Ros an Mhíl for ferry sailings.

Údarás na Gaeltachta

Údarás na Gaeltachta was established in 1980, it is the regional authority responsible for the economic, social and cultural development of the Gaeltacht. The overall objective of Údarás na Gaeltachta is to ensure Irish remains the main language of the region and is passed on to future generations.

An Roinn Talmhaíochta, Bia agus Mara (Department of Agriculture, Food and the Marine - DAFM)

The DAFM is the Government Department with responsibility for Fishery Harbours. DAFM manages the harbours and runs a number of the harbour services.

Bord Iascaigh Mhara - BIM

BIM is a semi-state body with responsibility at the national level for development of the seafood sector in Ireland. BIM has regular interaction with the catching, aquaculture and processing sub-sectors. BIM helps to develop the Irish seafood industry by providing technical expertise, business support, funding and training and by promoting responsible environmental practice. It operates the European Fisheries Fund and other investment support schemes on behalf of its parent department, the DAFM.

---

[17] *Irish seafood exporters directory.* Bord Bia.

Sea Fisheries Protection Authority - SFPA

The SFPA was established under the provisions of the Sea-Fisheries and Maritime Jurisdiction Act 2006. The SFPA has a dual role, firstly in sea fisheries conservation and secondly in seafood safety. Their mission statement reads: *the SFPA is committed to the effective and fair regulation of the seafishing and seafood sectors that fall within our mandate. This means all fishing vessels operating within Irelands 200-mile limit, Irish fishing vessels wherever they operate, and all seafood produced in Ireland wherever it is marketed*. Based in Clonakilty, the SFPA has offices in the FHCs including Ros an Mhíl.

Galway County Council

Galway County Council is responsible for the administrative area of County Galway. The council is responsible for the planning, design and construction of important infrastructures such as roads, water supply and drainage facilities.

Ros an Mhíl Harbour Development Advisory Group

Ros an Mhíl Harbour Development Advisory Group is made up of relevant fisheries and local government sector stakeholders and the DAFM to discuss ongoing issues related to the FHC.

Coiste Tacaíocht

Coiste Tacaiocht is a committee comprised of representatives from the local community and local businesses. The main aim of the committee is to support the Development Plan for Ros an Mhíl Harbour and in particular the building of the deep water pier.

Marine Institute

The Marine Institute is the national agency responsible for marine research, technology development and innovation. They seek to assess and realise the economic potential of Ireland's marine resource; promote sustainable development of the marine industry through strategic funding programmes and essential scientific services; and safeguard the marine environment through research and environmental monitoring.

An Roinn Ealaíon, Oidhreachta agus Gaeltachta (Department of Arts, Heritage and the Gaeltacht)

The Department oversees the conservation, preservation, protection and presentation of Ireland's heritage and cultural assets. The Department also seeks to promote the Irish language and to support the Gaeltacht.

Rossaveal Port Services (Lasta Mara Teo)

Lasta Mara Teo was set up to facilitate utility and heavy cargo services to the Aran Islands. Since January 2005 Lasta Mara Teo has operated the cargo contract to the three Aran Islands – Inis Mor, Inis Meain and Inis Oirr. A 'roll on roll off' service is provided for heavy goods machinery.

5.2 Public Intervention

Table 27. Public intervention in the Ros an Mhíl area. Source: BIM

	Source of Funding	Public Sector Investment	Intended to achieve	Outcomes
Fisheries-related expenditure				
Harbour development	National Fisheries Fund/Exchequer	€2.2m (2011) €1.4m (2010)	Safety and maintenance, disability access, ferry pontoons, small craft harbour, passenger shelters, car park, road improvements	Ros an Mhíl Harbour Development
Axis 1; Vessel Measures	FIFG/EFF/Exchequer	€3.8m (€15.4m total investment)	Vessel Modernisation	Vessels ungraded for improved safety, quality, and efficiency.
Axis 1; Decommissioning	FIFG/EFF/Exchequer	€4.4m(€4.4m total investment)	Removal of vessels from the fleet	Reduction in fleet capacity.
Axis 2; Aquaculture	FIFG/Exchequer	€3.3m(€8.3m total investment)	Support for Aquaculture Development	Modernisation and increased aquaculture production.
Axis 2; Processing	Exchequer	€3,712 (€14,848 total investment)	Support for the Processing Sector	Improvements to increase value-added production and reduce production costs.
Axis 3;Supporting Measures	FIFG/EFF/Exchequer	€5.4m(€7.5m total investment)	Support for Sea Fisheries Sector	Improvement of value-added potential, fish quality, data collection, knowledge of stocks, management strategies, TCM's.
Non-fishing related expenditure				
Roads	Galway County Council	€7.4m (2006-2008)	2006-2008 multi annual road restoration	

5.3 Advisory Group

During the course of this report, meetings and discussions were held with a number of different parties. Some of the key contacts in the Ros an Mhíl fisheries sector are provided below:

Table 28: Key contacts in Ros an Mhil fisheries sector.

Meadbh Seoighe	Údarás na Gaeltachta
Kevin MacGabhann	Sea Angling Representative
Mairtin Conneely	MFV "Iuda Naofa Iascaire"
Mairtin Og Conneely	
Cliona Conneely	MFV Maggie C & Chair Galway and Aran Co-op
Sonya Nic Lochlainn	Údarás na Gaeltachta
Cathal Groonell	Iasc Mara Teo
Don Hoctor	Iasc Mara Teo
Mairtin O'Conghaile	Coiste Tacaiocht Ros an Mhíl
Captain John C. Donnelly	Harbour Master, DAFM
Sean Griffin	Galway and Aran Co-Op
Jim Smyth	Galway and Aran Co-Op
Gerard Egan	Engineer, DAFM
Peter Tyndall	BIM
Seamus Breathnach	BIM

6. Qualitative Interpretation and Analysis

This report has detailed the importance of the seafood sector to Ros an Mhíl harbour area. The sector accounts for 92% of turnover and 86% of employment created in Ros an Mhíl. Its proximity to the Aran Islands also makes Ros an Mhíl FHC invaluable to the residents of the islands and acts as a catalyst for the development of the island based tourism industry. There were approximately 345,000 passenger movements at the harbour in 2011[18].

A number of key issues arise from the report and stakeholder consultations which will be discussed below.

6.1 Summary Findings

6.1.1 Socio-Economic Profile

The Ros an Mhíl harbour area is considerably more disadvantaged than the West region or the country as a whole. In 2011, the Relative HP Index score for Cill Chuimín ED was -11.8, and thus deemed a disadvantaged area by national comparison. Low population growth has been experienced in the area.

Education levels are below the national average. In 2011, 28% of the adult population in Ros an Mhíl's ED of Cill Chuimín had primary education only compared to a national rate of 16%. Despite this, there has been a continuous improvement in the level of adult education, as in 1991 48.3% had primary education only. Third level education has more than doubled in the area over the twenty year period and in 2011 the percentage of the population with third level education was 21%.

Semi- and unskilled professions are prevalent in the harbour area and account for a significant share in the locally available jobs. The male unemployment rate was three times the national rate in 2006 and almost twice the national rate in 2011. Female unemployment rates in Cill Chuimín ED were also above the national rates from 1991 to 2006. Nevertheless, in 2011 the female unemployment rate fell below the national average.

In terms of employment, 86% of employment in Ros an Mhíl is related to fishing. This is remarkably high, even surpassing the dependence of 81% for Castletownbere and 68% for Killybegs. Sectors such as tourism make only a small contribution to Ros an Mhíl despite it acting as the main ferry terminal to the Aran islands.

6.1.2 Fishing Sub-Sectors

The total number of vessels in the Ros an Mhíl fleet has remained relatively stable. While the number of vessels in the 18–24m segment decreased significantly due to decommissioning, there has been growth in the inshore fleet from 2008 and little change in the remaining fleet. From 2008 to 2011 the gross tonnage for the 24-40m segment increased by 38%.

---

[18]Department Agriculture, Food and the Marine Annual Report, 2011.

In relation to all vessels landing into Ros an Mhíl the number of vessels in the 18–24m and the >24m segment decreased considerably. From 2008 to 2013 the gross tonnage for the 24-40m segment decreased by 28%, by 35% for 18-24m segment, by 4% for the 12-18m segment and only for the 10-12m segment has gross tonnage increased, by 9%.

In 2013, the catching sector landing in Ros an Mhíl had an estimated turnover of €15.5m and employed approximately 238 FTE (119 FTE in Ros an Mhíl). The pelagic subsector accounted for 40% of landings volume but 11% of landed value to Ros an Mhíl. The reverse is the case for nephrops which accounted for 25% of landings volume but 71% of landings value.

There are 205 vessels operating out of the small local harbours of the Ros an Mhíl hinterland, 91% of which are less than 10m.

The processing sector employed 56 FTE staff in 2011 and contributed almost €22m in turnover to the local economy, representing the largest sub-sector in turnover terms. Pelagics and shellfish represent the most important sectors for value added in Ros an Mhíl, the majority of which are exported to Europe and Africa.

The impact of the fishing and fish processing industries of Ros an Mhíl spread far beyond the immediate locality into the regional, Co. Clare, Co. Galway, and national economies. At the regional level, the multipliers indicate that 213 jobs and €50m of output in the economy of Co. Clare and Co. Galway depend directly, indirectly and as a result of the induced effects of the 119 jobs and €15.5m output in the fishing sector in 2013. The type II multipliers from the processing industry indicate that 270 jobs and €58m of output in the regional economy depend directly, indirectly and as a result of the induced effects of the 56 jobs and €22m output in the fish processing sector. At the national level the downstream effects of fishing activity in Ros an Mhíl generates 268 jobs and €73m in turnover, while the processing sector generated 380 jobs and €90m. In general the multipliers for fish processing are higher than those for the fishing sector reflecting the fact that the processing sector purchases the raw materials for its activities. Although the multipliers for the processing sector are higher than the fishing sector, a programme to promote the recovery and development of the fishing industry would benefit both the fishing and fish processing sectors.

The aquaculture sector takes in activities in the areas surrounding Ros an Mhíl FHC. Finfish constitutes the highest value in terms of volume and value in the area. In employment terms, the finfish farming sector employment has fallen over the years and in 2011 employed 13 FTE. Employment in the shellfish sector has also fallen over the years but to a lesser extent and in 2011 employed 15.5 FTE. A large proportion of employment in the sector, in particular shellfish, is casual employment. In 2011 the shellfish sector had 81 casual employees. There is a small scale abalone farm, employing approximately 2 FTE in Ros an Mhíl specifically.

The ancillary sector in Ros an Mhíl is small scale. Ancillary services located in Ros an Mhíl include chadlery, net repair, light engineering, and harbour services including an ice plant. Fuel is supplied by Galway and Aran Co-op and other external suppliers. Engineering, hydraulics, cold stores and insurance businesses are based mostly in Galway. Other ancillary services are available in neighbouring towns. Vessels travel to Killybegs or Cork for major repairs.

6.2 Challenges

A number of challenges facing the sector were identified from stakeholder consultations, including:

- Deep water quay
- Lack of dry dock
- Access to resource
- Reduced quotas
- Cheap imports
- Poor labelling and traceability
- Increased harbour dues
- Lack of assistance and recognition from the department
- Excessive regulation and enforcement
- Infrastructure

Many of those consulted referred to the lack of quota or poor quota management, additional regulation and enforcement as all creating pressure on businesses and preventing diversification into new areas. Ros an Mhíl is a major landing port for herring and should benefit from improved management of the North West herring fishery. The quota for this fishery has declined over the years. During the same period the Celtic Sea herring has increased. A recovery programme should be introduced for the fishery. A large percentage of the mackerel quota is allocated to larger vessels. The vessels landing into Ros an Mhíl receive only a small proportion of the quota. If a larger quota was given to the smaller vessels more fish would be landed into Ros an Mhíl and other Irish ports for processing.

The lack of a deepwater landing facility was cited as a major constraint to Ros an Mhíl, making it impossible for larger vessels to land into the harbour. Pelagic processors are hampered by access to adequate supplies of fish throughout the year. They process for 6 – 7 months of the year but have to carry overheads for the entire year, making it difficult to remain profitable. Larger vessels are unable to land into Ros an Mhíl which results in it missing out on species landed by larger vessels such as blue whiting with its related processing opportunities. If blue whiting was landed into Ros an Mhíl the processing season would be extended by approximately two months.

Similarly, the lack of a dry dock facility was identified as a major cost and inconvenience to the local fleet. Vessels have to travel to Killybegs or Baltimore to carry out essential repairs and maintenance. Furthermore, money on ancillary services such as engineers and mechanics is spent outside of the local area or local engineers need to be transported to the vessels.

High running costs and access to finance were also cited as barriers to business development in particular for the processing sector. The rates and charges for the FHC were revised in 2012 and these have been identified as an additional barrier to the fishing sector.

Cheap imports and poor labelling and traceability were identified as an issue the industry has to overcome. Labelling on seafood is minimal; 'North East Atlantic' provides minimum information on the species for sale. The industry is also competing with cheaper imports from other European countries as well as imports of fish from outside the EU such as pangasius, tilapia and other farmed fish, whitefish and prawns. This is one of the key challenges (low cost imports) that have been identified by BIM if the potential inherent in the Irish seafood sector is to be realised. These challenges include:

- Recessionary effects – reduced prices for seafood, difficulty in obtaining working capital, increased interest rates;
- Access to the resource – a stronger emphasis on environmental protection and conservation;
- Lack of scale and inefficient logistics chain;
- The growth of low cost imports from countries operating from significantly lower cost bases and a lack of differentiation of Irish seafood;
- Changing consumer preferences – a premium on convenience, versatility and price.

6.3 Adaptation and Diversification

- Quality labelling
- Gear adaptations and fishing techniques
- New markets and new value-added products
- Added value – canned abalone – development with BIM
- Ancillary sector has diversified into non-fishing related sectors

The harvest sector has adapted to increased fuel costs and demands for reduced discards through sourcing more selective and fuel-efficient gear. Mesh sizes have been increased through the use of square mesh panels and along the east coast Swedish grids are used to reduce cod by-catch in the nephrops fishery.

There is recognition for the importance of fish quality and appropriate stock management. Members of the pelagic fleet have the MSC label for mackerel and herring while those targeting whitefish have the BIM quality label. Vessels have also diversified into other fisheries such as tuna. The fleet is getting better at locating tuna resources and in 2011 exported 3,000 tonnes.

The processing sector has developed new products. Breizon has created a new label 'Windows to the Sea' retailing ready to eat seafood products specifically for the Irish market.

The abalone farm is developing canned abalone in conjunction with BIM's Seafood Development Centre to add value to their product. The ancillary sector has looked to diversify into non-fishing sectors.

6.4 Future Development

- Development of deep water quay
- Dry dock facility
- Improved efficiencies
- New markets, foreign landings
- Better branding and marketing of seafood
- Increase added value before the fish leaves the area
- Develop local infrastructure (tourist facilities, walkways)

Planning permission for a deep-water quay providing 200m of berthage and 8m of depth alongside is already in place. This planning permission is valid until 2016. It is a natural harbour with depth of 10m and does not require a breakwater. Presently there are no foreign landings into Ros an Mhíl. The proposed development would allow larger vessels to land their catches into Ros an Mhíl and thus attract foreign landings. The Department's Food Harvest 2020 states: '88% of the fish caught in the Irish EEZ is by non-Irish vessels. Trends in fuel prices suggest it will be more advantageous for more non-Irish vessels to land in Ireland than in their home countries, which if available for sale in Ireland would benefit domestic processors'. The development would create the potential for processors and agents to add value to landings from non-Irish vessels before transhipment to the continent.

A dry dock facility will reduce costs to the local fleet and increase demand for ancillary services in the area. It is hoped to apply for planning permission in the near future.

A programme to promote the recovery and development of the fishing industry would clearly benefit both the fishing and fish processing segments. The gain would be magnified throughout the regional and Irish economies as a whole since the potential for both industries could be much greater in absolute terms for output, income and employment.

DAFM's Food Harvest 2020 highlights areas where the seafood sector could develop and included the following recommendations of relevance to the Ros an Mhíl fishing sector:

- The share of catch being processed by Irish companies should be progressively increased, adding value in Ireland. While seeking to maximise landings from Irish vessels, sourcing additional supply for Irish processors from non-Irish vessels should be encouraged.
- The development of innovative, consumer oriented seafood products should be supported by BIM Seafood Development Centre and Teagasc Ashtown Food Research Centre.
- While recognising the place of specialist food processors serving niche markets, restructuring and enhanced co-operation within the production, sales, marketing and processing areas should be supported by specific programmes.

- The skills levels in the sector should be augmented by focused technical training and boosting of management competence through the introduction of training, mentoring programmes and graduate placement programmes.
- There should be a greater integration of the seafood sector into the Irish food sector and treatment of it as such.
- The implementation of quality and traceability labelling including voluntary labelling and certification for Irish fish products should be accelerated by the sector with appropriate supports from BIM and Bord Bia to differentiate Irish products on domestic and export markets.
- At EU level, Ireland should press for amendments to the Common Organisation of the Markets to make it mandatory to give full details of the origin of products.

Infrastructure for angling, ferry and small craft is already in place and creates the opportunity to encourage more visitors to Ros an Mhíl. To benefit from this, there exists a need for a proper restaurant, waiting and toilet facilities. The area can be developed further with walkways and paths.

Bord Iascaigh Mhara,
Irish Sea Fisheries Board,
Crofton Road,
Dun Laoghaire,
Co. Dublin,
Ireland.

Tel.: +353 1 2144 100
Web: www.bim.ie
Email: info@bim.ie