Fishing activities on the Central Oyster Grounds

Supplement to LEI Memorandum 13-049

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Introduction

In response to a request from the Ministry of Economic Affairs an update of the data and analyses on the fishing activities of the Dutch fishing fleet on Central Oyster Grounds for the years 2012 and 2013 has been made. In this update the same data sources and methods are used as in the memorandum that was published previously (Oostenbrugge et al., 2013).

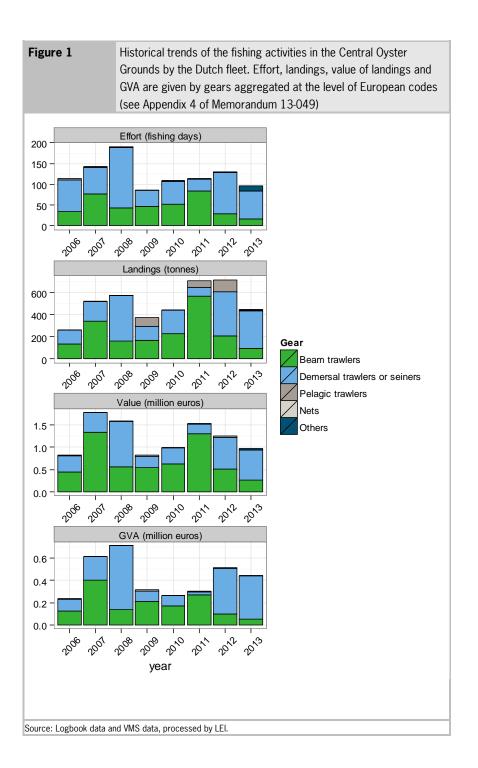
Results

Table 1 shows the development in total landings, landings value and contribution to the Gross Value Added (GVA)¹ of the Dutch fishing fleet on the Central Oyster Grounds.

Table 1	Overview of landings and values of the Dutch fishing sector in the Central Oyster Grounds							
	2006	2007	2008	2009	2010	2011	2012	2013
Landings (tonnes)								
Central Oyster Grounds	265	520	578	378	443	709	719	448
Value (1,000 euros)								
Central Oystergrounds	814	1,765	1,576	826	979	1,523	1,253	973
Gross Value Added (1,000 euros)								
Central Oystergrounds	233	615	709	317	351	519	514	439
a) preliminary estimates;								
Source: Logbook data and VMS da	ita, processed by LE	Ι.						

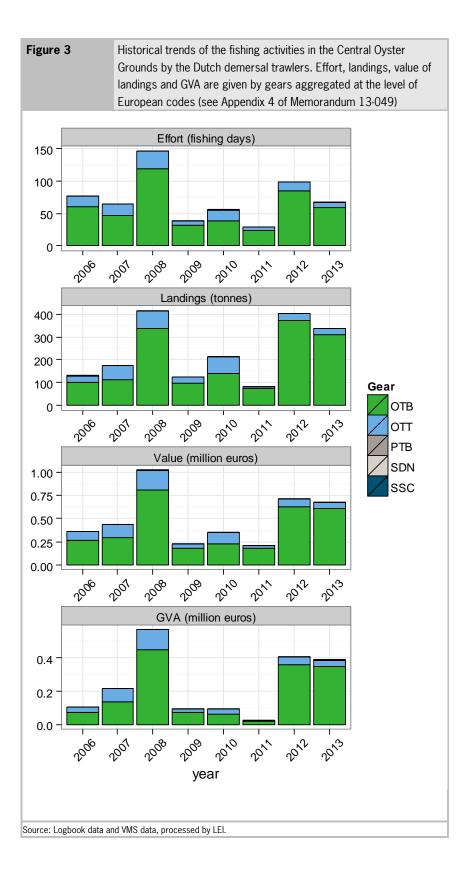
The fishing intensity in the area has been highly variable. It has increased substantially during 2010-2012, resulting in total landings of around 700 tonnes, but in 2013 the situation reversed and the total landings value decreased to around €1m, representing a gross added value of around €0.4m.

 $^{^{1}}$ The results for 2013 are preliminary estimates, based on the proportion of GVA and landings value in 2012.



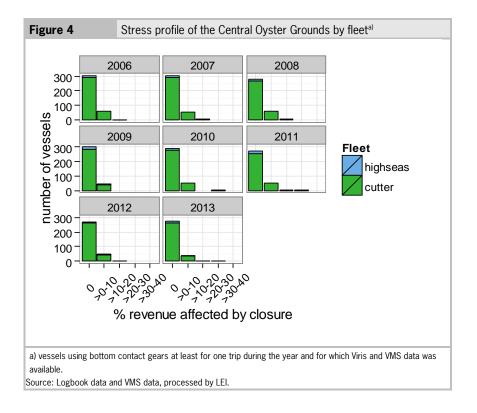
The most important change in fishing activities in the area during the last two years was the shift from beam trawl to Demersal trawls (Figure 1). Beam trawl activity decreased with almost 80% from 2011 to 2013. Almost none of the fishing activities in the area were carried out by pulse trawls (TBP) (Figure 2). This is logical as most of the fishery carried out in the area is targeting plaice whereas pulse fishing is used to target sole. Most of the activities with demersal trawls were carried out by otter board trawls (OTB) (Figure 3). Based on information from the fishing sector this might be mostly twin trawls, which have been misreported in the logbooks.

Figure 2 Historical trends of the fishing activities in the Central Oyster Grounds by the Dutch beam trawlers. Effort, landings, value of landings and GVA are given by gears aggregated at the level of European codes (see Appendix 4 of Memorandum 13-049) Effort (fishing days) 80 60 40 20 0 2012 2000 2007 2008 2000 2010 2011 Landings (tonnes) 400 200 Gear 0 2011 2012 3000 2007 2010 3000 2008 TBB TBP Value (million euros) TBS 1.0 0.5 0.0 3012 3000 2001 2010 ⁵008 3000 3011 301,3 GVA (million euros) 0.4 0.3 0.2 0.1 0.0 2001 2011 2010 2006 2008 2009 year Source: Logbook data and VMS data, processed by LEI.



In order to show the dependency of individual vessels from the area, a stress profile has been made for the whole area of the Central Oyster Grounds (Fig 4). This graph shows the dependency of individual vessels, measured by the value of landings from the area (that would be affected by a theoretical closure) relative to the total value of landings. The individual dependency levels are then aggregated in the profile shown in Figure 4. More about the background of the method can be found in Hamon et al. (2013). The analysis suggests that around 60 vessels have been active in the selected area per year and that this number has decreased in 2013 to around 40. For most of the impacted

vessels, less than 10% of the revenue came from the selected area. A limited number of vessels generated more than 10% of their revenues coming from the area.



Conclusions

The fishing intensity on the Central Oyster Grounds has shown considerable variation over the years, without a clear trend. The area represents limited value for the Dutch fishing fleet with total revenues between €1-2m and an average Gross Added Value of around €0.5m in the period 2011-2013. With these landings, the contribution of the fishery in this area to the total value of landings and the GVA of the total Dutch demersal fisheries (STECF, 2014) is still relatively low compared to other areas; 0.4% and 0.4% respectively. Over the last years the importance of the beam-trawl fishery has diminished in the area. A small number of vessel that are operating in the area obtain a large part of their revenues from this area, but the dependency of most of the vessels is quite low (<10%). It should be noted that the results presented here are not exact numbers but estimates based on a complex estimation procedure with multiple assumptions. More about the assumptions and the resulting uncertainty in the estimates can be found in Oostenbrugge et al. (2010).

Literature

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