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Assessment of the status, development and diversification of fisheries-dependent communities

URK Case study report

July 2010
This report has been prepared through a joint collaboration between Alyne Delaney (IFM, Aalborg University, Denmark) and Ellen Hoefnagel, Heleen Bartelings, and Jacob van Oosterhout (LEI/DOI, The Netherlands). The authors acknowledge the important role played by local stakeholders in providing both the quantitative data and the qualitative information presented in this report. This support has been critical in generating primary data not previously available for the Urk area.

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1. Introduction

This case study from the Netherlands presents the town of Urk in Flevoland Province. Urk is a well-known, extremely traditional fisheries community, home to both a large beam-trawl fleet and the Netherlands’ largest fish auction (also one of Europe’s largest). The main fisheries activities are trawling, the auction house, and processing with almost no aquaculture activities and limited support firms. The fisheries have been in decline in recent years given limited quotas for their limited species of interest and decommissioning schemes. Since beam trawling is highly fuel consumptive, some skippers are looking to change gear types. The primary species caught by the Urker fleet are plaice and sole; while most important imported fish for the processing are *pangasius* – a species which directly competes with locally landed flatfish. In less than a decade, the processing industry in Urk has gone from 10% of their supply being *pangasius* and other imported species, to 50% in 2010. Nevertheless, there is still a strong link between the fishing and processing sectors. A significant portion of landings are made by re-flagged vessels: those owned by Dutch family firms, but flagged and using quotas from other MS such as Germany, the UK, and Denmark. Also, much of the landings are trucked to the Urk auction from wherever the Urk boats may have come into port, thus keeping their landings local. Urk is considered a community highly dependent on fisheries and the community has gone through great difficulties in recent years.

1.1 Location

Urk is located in the Netherlands (North Sea region), with coordinates 52°40′N 5°36′E. The total Urk area is 109.90 km², it consists of 11.54 km² land surface and 98.37 km² water surface. This former island is located at the IJsselmeer in NUTS2 region Flevoland, this region covers the whole province of Flevoland, consisting of the Noordoostpolder and the Flevopolder. The distance from Urk to Lelystad, the capital of the province, is about 20 km and to Emmeloord, the closest city, is 14 km.

![Location of Urk in the Netherlands](source: Wikipedia)

*Picture 1. Location of Urk in the Netherlands*

1.2 Key geographical characteristics of the community

Urk is a former island on the border of the IJsselmeer in the province of Flevoland. Its written history dates back to the year 966. At that time Urk was an island in the Zuiderzee, the open inner sea in the centre of the Netherlands. The main livelihood of the population was, and still is, fishery. In the course of history storms reduced the size of the island to eighty hectares (about 198 acres).
In 1932 the Zuiderzee was closed by the Afsluitdijk, turning the sea into a large lake named IJsselmeer. As a result the seawater became freshwater. In 1939 Urk ceased to be an island when the dam between Lemmer and Urk was completed. This dam was part of the construction of a new polder which was reclaimed in 1942. Urk retained its harbour and is situated at the south-western tip of this Noordoostpolder. In 1948 its first road link with the old land was established. While still an island, the Urker population grew slowly, from 1,200 in 1850 to 4,202 in 1940. After World War II the population grew rapidly and in October 2003 the 17,000th inhabitant was born. Half the population is younger than 27, twice the average figure for The Netherlands. Overall the village is devoutly Calvinistic and religion more or less dictates Sundays. Most people attend church twice and refrain from any work whatsoever.

The climate in the Netherlands is a maritime climate, with cool summers and mild winters. The average temperature is 2° C in January and 19° C in July, with an annual average of about 10° C. Clouds generally appear every day, and in the winter months fog often abounds, while rainfall occurs frequently. Average annual rainfall is about 76.5 cm.

The port of Urk is relatively sheltered and the coast is built up out of dikes. For the sea-going Urk fishing vessels, the fleet uses another port. This port is situated in Harlingen in the north of the province Friesland at the coast of the Wadden Sea, 93 kilometres north of Urk. Fishing vessels may also use other fishing ports like Den Helder and Ijmuiden. Urk vessels do come into the Urk harbour for minor repairs and maintenance, but the harbour is too shallow for them to enter fully loaded.

2. Demographic aspects

2.1 Population and population age structure

Graph 1 shows changes in the total population in Urk over the past 10 years in comparison to national changes.

Source: CBS 2010

Figure 1: Total population of Urk and the Netherlands 1998-2009

1 CBS 2010, Centraal Bureau voor de Statistiek, den Haag
Urk and national demographic averages are becoming more in line; however the Urk population is younger than the Dutch population on average. This is due to a higher number of children per household than the average Dutch household.

Details of the present age structure and the changes in age structure in Urk over the past ten years are provided below in Figure 2 which shows demographic changes over time and can be compared to the Dutch age structure changes in Figure 3.

Figure 2: Age structure of Urk population 1998-2008

Figure 3: Age structure of the Dutch population 1998-2008

Source: CBS 2010
2.2 Ethnicity and migration

In 2009 only 2.6% of the inhabitants of Urk were foreign. In the Noordoostpolder, foreigners make up 10.9% of the populations while for the whole of Flevoland, foreigners number 26.4% (province Flevoland). For the Netherlands this figure was 19.2% in 2007. Urk is considered a ‘closed’ community because of its fisheries culture and protestant orthodox religion. There is hardly any immigration (10 persons in 2004 and 10 in 2008) or emigration (10 persons in 2004 and 10 in 2008) in Urk.

3. Economic aspects

The fisheries sector is traditionally important for the economy of Urk. Directly or indirectly some 2000 inhabitants of Urk are working in the fishing sector (in 2010). Part of this sector is the modern North sea fleet and the small IJsselmeer fleet, the harbors of Urk and the two auctions of Urk, the NV Fish auction Urk and IJsselmeer auction (for inland fisheries).

The North Sea fish, mainly sole and plaice, of the Urk fleet is mostly landed in the north of Holland in Harlingen and transported by truck to the Urk fish auction. The Urk fish auction is the largest in the Netherlands; 30% of the traded fish is auctioned at Urk. There is also a large fish processing industry active in Urk.

Within the fishing sector changes are currently taking place; the fleet is decreasing fleet and the processing and upgrading of fish products that originate from foreign shores, are increasing. Also, there is an increase in employment in other sectors like commercial services, trade and transport. Inhabitants of Urk are known for their strong work ethic.

3.1 Importance of economic activities

Economic value of the four main economic sectors of the Noordoostpolder, Urk included, over five years are presented below (Figures 4 and 5).
Fisheries are of major importance to Urk and Urker fisher families would very much like to continue fishing. Due to, for example, quota regulations, many Urker fishers bought foreign fishing vessels, and now fish under the flag of the vessels origin, such as Great Britain, Germany and Denmark. The modern fleet operates in all but only the most severe of weather conditions. The processing sector is flourishing currently thanks to the trade of foreign fish products supplementing traditional flatfish, despite the decreasing Dutch landings. Tourism is only slowly developing in Urk, due to the orthodox protestant religion and culture. The Urk municipal government has plans in the works to stimulate tourism in...
Urk, such as through developing more and better harbour facilities. One precondition, however, is that tourists should respect Sunday Rest and the culture of Urk.

3.2 Employment and unemployment

In 2004, 6,000 people in Urk were employed; in 2008 this number was 6,600, this was respectively an economic participation of 60 % and 62 % of the total population of 15-64 year olds.

In 2004, 310 people in Urk were unemployed; in 2008, 330 people were unemployed in Urk, this was in both cases an unemployment rate of 5 %.

In Urk, however, youth unemployment is extremely high with 38 % of the unemployed younger than 27. Limited job availability for young people in the community may be one factor; another is that the age distribution in Urk is younger than in other parts of Flevoland (Flevoland 2008-2009) and the Noordoostpolder.

For the Netherlands the unemployment rate was in 2004 5.3 % and in 2008 4.1 %.

Below are presented data for the Noordoostpolder, including Urk (Figure 6).

Figure 6: Employment Noordoostpolder, Urk included.

Source: CBS 2010
Employment in Urk:

Figure 7: Employment in Urk

Source: Municipality of Urk

Figure 8: Full time employment in Urk

Source: http://www.kennisvanmijnregio.nl/informatie-per-gemeente/urk/bedrijvendynamiek
Number of jobs in Urk including part-time jobs are shown below in Table 1:

<table>
<thead>
<tr>
<th>Industry</th>
<th>Urk</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Agriculture), fisheries</td>
<td>779</td>
</tr>
<tr>
<td>Industry</td>
<td>2,169</td>
</tr>
<tr>
<td>Waterdistribution/sewage treatment</td>
<td>20</td>
</tr>
<tr>
<td>Building industry</td>
<td>679</td>
</tr>
<tr>
<td>Wholesale, retail; garages</td>
<td>1,330</td>
</tr>
<tr>
<td>Transportation and storage</td>
<td>308</td>
</tr>
<tr>
<td>Catering industry</td>
<td>223</td>
</tr>
<tr>
<td>Information and communication</td>
<td>114</td>
</tr>
<tr>
<td>Financial institutions</td>
<td>60</td>
</tr>
<tr>
<td>Real estate sector</td>
<td>19</td>
</tr>
<tr>
<td>Professional services, consultancy, research</td>
<td>313</td>
</tr>
<tr>
<td>Commercial services</td>
<td>571</td>
</tr>
<tr>
<td>Public services</td>
<td>217</td>
</tr>
<tr>
<td>Education</td>
<td>444</td>
</tr>
<tr>
<td>Health and welfare services</td>
<td>703</td>
</tr>
<tr>
<td>culture, sports and recreation</td>
<td>49</td>
</tr>
<tr>
<td>Other services</td>
<td>156</td>
</tr>
</tbody>
</table>

Source: Province of Flevoland. Last update: 2 februari 2010

According to the data (above) there would appear to be more jobs than available labour. However 24% of these jobs are part-time jobs. It could also mean some Urk inhabitants...
have more than one job and some people from outside Urk work in Urk. Labour participation of women in Urk is low: 46% in 2007. Significantly, in Flevoland women in the workforce stands at 67%. The low number of women in the workforce in Urk can be explained by the historical fact that men were traditionally at sea, leaving their wives to take care of the large families. Another key factor is the fact that the orthodox protestant religion does not stimulate women to work.

Figure 8 below shows the amount of labour in fisheries including labour in the fishing industry divided by total labour in Urk. Including crew on foreign but Urker vessels and excluding labour in the ancillary industries.

\textit{Urk fisheries dependency}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{Regional_fisheries_dependency}
\caption{Regional Fisheries Dependency}
\end{figure}

It can be seen from these statistics that the fisheries dependency of Urk is decreasing from 42% to 35% over this period. Nevertheless, this employment rate is still very high.

3.3 Infrastructure

Urk is close to the A6 route from connecting northern Netherlands and the Randstad. The trip from Urk to Amsterdam takes approximately one hour. From the A6 Urk is a 3 minute drive. The connection is the Domineesweg, at the moment it is an 80-km road, but within a few years capacity will be increased to the requirements of a 100-km road. Next to the A6 (North - South / West connection) is the N50 (A50 from Zwolle) just 13 km from Urk. This means that to the eastern part of the country the connection is good. The North, where the seaport of Urk, Harlingen, is situated, can be reached by the A6 and A7 and is also a one hour drive.

Urk is one of the major ports of the IJsselmeer. It is a junction on the busy water route from Amsterdam to the Northern Netherlands. The port facilities are excellent. Urk harbour construction capacities are suitable for large ships, which is also made possible by the deep channel. The outer has a depth of 5.5 m. The inner can be reached by vessels with a maximum depth of 3 m. Urk is available for cargo ships, yachts and fishing boats.
Schiphol Amsterdam International Airport is within a distance of 100 km of Urk. There are also several commercial ports in the area, such as Amsterdam and Hoorn.

In early 2008 there were 1,320 businesses located in Urk (Table 2). The share of fisheries in Urk is highest in the region.

### Table 2: Number of businesses in Urk

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of enterprises in Urk</td>
<td>970</td>
<td>1,320</td>
</tr>
<tr>
<td>New enterprises</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>Closures</td>
<td>60</td>
<td>50</td>
</tr>
<tr>
<td>Number of industrial parks</td>
<td>30</td>
<td>17</td>
</tr>
</tbody>
</table>

Source: Flevoland Province

In 2008, there were 5,066 school-going children (5-18) in Urk.

Urk is also home to a nautical school, Berechja College, which includes a fisheries faculty.

There is also a Protestants Christian College in Urk: Reformatorische Scholengemeenschap voor PRO/VMBO/Havo/Lyceum.

The region is home to several other secondary colleges and 16-18 and 18+ technical and vocational training school to which Urker students may attend, but to which they must travel.

### 3.4 Local development plans

The economic plans of the Town of Urk is directed towards balancing the labour force and job availability on the one hand and on the other diversification of employment while securing the strong position in the fishing sector on the other.

Urk is the fish centre of the Netherlands and the flatfish centre of Europe, according to the municipality. The municipality would like to keep both auction halls in the municipality and they feel the fish processing industry should be stimulated to add value to its products.

It still wants to diversify its local economy by stimulating starter enterprises (in other sectors than fish), by promoting Urk as a good place to situate an enterprise and to facilitate new and old businesses with good conditions.

Urk also intends to stimulate tourism, especially water tourism by upgrading the harbour, its environment, accommodations and catering.

In addition to tourism, Urk is stimulating shipbuilding and transport by water through improved harbour facilities.
4. **Fisheries and aquaculture sector**

4.1 **Details of the local fishing fleets**

Table 3 provides a quantitative description of the catching sector that details the key fleet segments, gears, crew size, trip length, and fishing areas in 2009.

**Table 3 Quantitative description of the catching sector**

<table>
<thead>
<tr>
<th>Segment (length class)</th>
<th>Number of vessels</th>
<th>main gears used</th>
<th>Number of crew (average)</th>
<th>Main species fished (list at least 3 and up to 5 for all fleet types)</th>
<th>Main fishing locations (ICES areas)</th>
<th>Trip length (average days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-24m</td>
<td>10</td>
<td>beamtrawl</td>
<td>3</td>
<td>shrimp</td>
<td>IVb-c</td>
<td>2.8</td>
</tr>
<tr>
<td>24-40m</td>
<td>8</td>
<td>beamtrawl</td>
<td>5</td>
<td>sole, plaice</td>
<td>IVb-c</td>
<td>2.1</td>
</tr>
<tr>
<td>&gt;40m</td>
<td>20</td>
<td>beamtrawl</td>
<td>7</td>
<td>sole, plaice, turbot</td>
<td>IVb-c</td>
<td>1.9</td>
</tr>
<tr>
<td>0-12m</td>
<td>12</td>
<td>passive gear</td>
<td>1</td>
<td>sole, cod</td>
<td>IVc</td>
<td>0.8</td>
</tr>
<tr>
<td>24-40m</td>
<td>16</td>
<td>Demersal trawls</td>
<td>5</td>
<td>mullet, plaice sole</td>
<td>IVb-c, VIIId-e</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Source: Vessel registry 2009

In addition to these (above), there is an Urker fleet consisting of fishing vessels flying a foreign flag. This segment is also slowly decreasing from 60 to 50 vessels.

The following graphs provide a quantitative description of the trends in key (Dutch) Urker fleet segments (length class and metier) over time. It is clear that the large beamtrawl fleet of over 40 meters and over 24 meters of length is decreasing. This is due to decreasing quota and high fuel prices. New fishing techniques are demersal trawls consisting of sunwing, pulse trawl, and twin-rig, all techniques that consume less fuel.
Figure 10: Number of Dutch vessels in Urk

Source: Vessel registry 2009

Figure 11: KW of the Dutch Urker fleet

Source: Vessel registry 2009
In Urk, there was traditionally little difficulty finding crew since there is a fishing school and there are many fishermen's sons planning to become fishermen. Since the fleet has been decreasing it is becoming more difficult to find a job on board of a fishing vessel. As revenue from landings, which is shared with the crew, is decreasing, due to high fuel consumption of beam trawlers and the high fuel prices in the last years. This has led to a decrease in new student entrances at the Berechja college (Table 4), reflecting the uncertain future of the fisheries.

Table 4: Student entrances at Berechja College 2002-2009

<table>
<thead>
<tr>
<th>Year</th>
<th>Nr. of students entrances</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008/09</td>
<td>68</td>
</tr>
<tr>
<td>2007/08</td>
<td>59</td>
</tr>
<tr>
<td>2006/07</td>
<td>58</td>
</tr>
<tr>
<td>2005/06</td>
<td>71</td>
</tr>
<tr>
<td>2004/05</td>
<td>89</td>
</tr>
<tr>
<td>2003/04</td>
<td>83</td>
</tr>
<tr>
<td>2002/03</td>
<td>84</td>
</tr>
</tbody>
</table>

Source: Province of Flevoland : CFI, ROC Friesepoort, Aeres Groep, ROC Flevoland.
4.2 Fish stock status

Table 5 describes the main stocks on which the fleet depends. For the key marine stocks on which the local catching sector depends a description of the current catch relative to MSY, and/or stock status is provided. For the two main species, recovery plans have been installed of which plaice is rather well recovering.

Table 5: Fish stock status

<table>
<thead>
<tr>
<th>Species</th>
<th>ICES Area</th>
<th>Management responsibility</th>
<th>Stock status relative to MSY (above, near, below, unknown)</th>
<th>main management regulations affecting the stock e.g. Area closures, quotas, specific recovery plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sole</td>
<td>Ivb, IVc</td>
<td>under MSY</td>
<td>recovery plan</td>
<td></td>
</tr>
<tr>
<td>Plaice</td>
<td>Ivb, IVc</td>
<td>above MSY</td>
<td>recovery plan</td>
<td></td>
</tr>
<tr>
<td>Turbot</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mullet</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shrimp</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.3 Fisheries infrastructure

Urker fishers land their catch in Harlingen, IJmuiden, Delfzijl and Lauwersoog. The fish are then transported by truck to the auction hall at Urk.

All fishing harbours in the Netherlands are well equipped with fuel, repair facilities, suppliers of gear, chandlery, ice production, slipways, auction halls, processing factories.

4.4 Details of the local catching sub-sector

Details of landings volume, value and price at first sale by species group in the last five years in the area are presented below in various graphs. Figures from the foreign fleet (Dutch owned, but operated under foreign flags) are not included. As can be seen, landings of demersal species (mainly flatfish) dominate the landings.
It is estimated that landings volume may actually be 40% higher, since a great portion of the landings of the foreign Urker fleet are landed in Urk as well.

Figure 13: Landings volume Dutch Urker fleet

It is estimated that landings value may be increased by approximately 40%, since a great portion of the landings of the foreign Urker fleet are landed in Urk as well.

Figure 14: Landings value Dutch Urker fleet
A problem for the Urker fleet is the severe competition of plaice with *Pangasius*, a cultivated freshwater fish from Asia, since 2001.

Urker fishers are united in the Cooperative Producers Organisation ‘Urk’. This PO owns the two sea fish auction halls at Urk and Harlingen, which generate extra income for the fishermen.

Due to a voluntary auction system in the Netherlands for fishers who are organised in co-management groups, all fish needs to be traded through the auction halls. Some groups of fishers are aiming to sell their fish themselves with labels that indicate a high quality and/or sustainable fishing ways. Fishers at Urk are striving for a MSC label for flatfish. The Urker foreign fleet is not subject to these co-management rules, and are allowed to trade their fish directly if they like to. At least two Urker vessels flying a foreign flag have received respectively a MSC label and a responsible fishing label.

4.5 Details of the local processing sub-sector

There is a trend that the local processing sub-sector is becoming less concentrated on flatfish (Table 6).

<table>
<thead>
<tr>
<th>Year</th>
<th>Flatfish</th>
<th><em>Pangasius</em> (and others)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>90 %</td>
<td>10 %</td>
</tr>
<tr>
<td>2001</td>
<td>75 %</td>
<td>25 %</td>
</tr>
<tr>
<td>2010</td>
<td>50 %</td>
<td>50 %</td>
</tr>
</tbody>
</table>

Source: Municipality of Urk.
Most fish products originating from the processing sub-sector (+90%) are exported.

Below, change in number of employees in the processing sub-sector of Urk.

Table 7: Number of employees in processing sector

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Processing sector</td>
<td>2,130</td>
<td>2,194</td>
<td>1,896</td>
<td>1,870</td>
<td>1,862</td>
<td>-13 %</td>
</tr>
</tbody>
</table>

Source: municipality of Urk

Table 7 above shows a decrease of 268 permanent jobs in five years; however in the same time an increase of circa 250 temporary workers was noticed in this sector. In the processing industry work nearly as many women worked as men in 2009 (Table 8). Most employees working in the processing industry do not have vocational training\(^2\). An unknown proportion of the employees are not of Dutch origin.

Table 8: Number of employees working in the fish trade by sex

<table>
<thead>
<tr>
<th>Fish trade</th>
<th>2000</th>
<th>women</th>
<th>men</th>
<th>2005</th>
<th>women</th>
<th>men</th>
<th>2009</th>
<th>women</th>
<th>men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index</td>
<td>116</td>
<td>20</td>
<td>96</td>
<td>142</td>
<td>24</td>
<td>118</td>
<td>235</td>
<td>60</td>
<td>175</td>
</tr>
</tbody>
</table>

Index 2000=100

<table>
<thead>
<tr>
<th></th>
<th>100</th>
<th>100</th>
<th>100</th>
<th>122</th>
<th>120</th>
<th>123</th>
<th>203</th>
<th>300</th>
<th>182</th>
</tr>
</thead>
</table>

4.6 Details of the local aquaculture sub-sector

In Urk only one aquaculture enterprise is active. It cultivates pikeperch and has difficulties to compete with cheap imported aquaculture products from low wages countries. Also Dutch environmental standards seem to be a barrier to economic efficiency.

4.7 Details of the local ancillary sub-sector

Local ancillary consists mainly of the following type of enterprises:

- One cooperative for fuel and nets
- One shipbuilder
- One ship yard
- One ship interior builder (boarding)
- One fuel delivery specialist

• Seven other local ancillary enterprises, like for electronics, catering, gear, repairs etc.

Below some of the ancillary industry by number of employees and sex 2000-2009

Table 9: Number of workers in the metal industry and shipbuilding related to fisheries sector 2000-2009

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>shipbuilding</td>
<td>105</td>
<td>5</td>
<td>100</td>
<td>78</td>
<td>7</td>
<td>71</td>
<td>82</td>
<td>6</td>
<td>76</td>
</tr>
<tr>
<td>Metal industry</td>
<td>5</td>
<td>3</td>
<td>12</td>
<td>33</td>
<td>5</td>
<td>28</td>
<td>16</td>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>8</td>
<td>112</td>
<td>111</td>
<td>12</td>
<td>99</td>
<td>108</td>
<td>9</td>
<td>99</td>
</tr>
<tr>
<td>Index 2000=100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>93</td>
<td>150</td>
<td>88</td>
<td>90</td>
<td>113</td>
<td>88</td>
</tr>
</tbody>
</table>

5. Governance

5.1 Key local institutions

Below a list of the key local fishing sector organisations by sub-sector/segment is presented.

• Private sector groupings:
  1. CPO Urk, owner of 2 auction halls;
  2. CPO Vissersbond, located in Emmeloord
  3. Fisheries Cooperative Urk;
  4. Association of Fish traders, the VVU.
  5. The fresh fish fishermen are united in PO Ijsselmeer, located in Emmeloord

Within the PO system, the Dutch have instituted a co-management system, termed the *Biesheuvel* system. This came about as a way to combat the increasingly antagonistic behaviour of fishers and managers/States towards one another in the late 1980s/1990s. In this system, consultation and compromise, a quite culturally-Dutch means of solving social and political problems, were used. In this co-management system, delegating a great deal of responsibility for quota management, self-regulation, and self-enforcement was delegated to the fishing industry itself. The idea behind co-management was to give the industry a sense of ownership and bring them in line with environmental sustainability. Though there

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4 van Ginkel 2000: “Draft Chapter 6: Commission Cooperation: Fat and Lean Years” in his monograph *Braving Troubled Waters: Sea Change in a Dutch Fishing Community (Texel) and Beyond.*
have been social and environmental costs, the industry and Netherlands’ national government have moved beyond the chaos of the early 1990s. Nevertheless, many fishers still feel the management system is out of their hands and they remain at the mercy of Brussels and the government.

- Management groups (including FLAGs) and their composition

  1. Platform fisheries, consisting of 31 Dutch fisheries communities and six provinces in the Netherlands, Mayor and aldermen of Urk, the ministry of agriculture, food and food security and the North sea fish centre. Meet three times a year.

  2. Fishery local Action group of the region and Urk

- Sector development groups and their composition:

  1. North Sea fish Centre, an organisation that promotes the North Sea fish product, and has its office at Urk.

Platform fisheries, Mayor and aldermen of Urk, representatives of the Ministry of Agriculture, Nature and Food security and the North Sea Fish Centre meet three times a year.

5.2 Public intervention

Table 10 provides details of the period 2002-2007 of the main items of public investments and the sectors to which these relate.
Table 10: Public Investment

<table>
<thead>
<tr>
<th>Public investment</th>
<th>Source of funding</th>
<th>Investment cost</th>
<th>What was the investment intended to achieve?</th>
<th>What were the outcomes (or expected outcomes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building fresh water fish auction facility</td>
<td>EFRO</td>
<td>2,000,000</td>
<td>Preserve and serve the historical fishing and selling methods. More efficiency. Attract tourists.</td>
<td>Active and controlled selling. Better service to the fishermen. Tourist program for active participation on how to buy fish. New facilities for guests</td>
</tr>
<tr>
<td>New quays for the water sports tourists/herinrichting havengebied Urk en ontsluiting</td>
<td>EFRO</td>
<td>950,000</td>
<td>Possibility to harbour more tourists with their boats and offer a saver place.</td>
<td>Tourists attending Urk has risen with 40 %</td>
</tr>
<tr>
<td>Training-ship</td>
<td>FIOV</td>
<td>320,000</td>
<td>Improvement of the future of the fishing sector</td>
<td>Sustainable sector, Consciousness-raising of a modern fishing sector</td>
</tr>
<tr>
<td>Aquaculture projects and new products and product lines in the processing industry</td>
<td>FIOV</td>
<td>1,800,000</td>
<td>Improvement of the future of the fishing sector in the market chain</td>
<td>New products, quality improvement, employment growth</td>
</tr>
<tr>
<td>2003 decommissioning</td>
<td>FIOV and National Government</td>
<td>6,500,000</td>
<td>Decreasing fleet</td>
<td>Healthier stocks; increase of profitability remaining fleet</td>
</tr>
<tr>
<td>2008 decommissioning</td>
<td></td>
<td></td>
<td>Decreasing fleet: 11 Urker vessels</td>
<td>Healthier stocks; increase of profitability remaining fleet</td>
</tr>
</tbody>
</table>

Source: municipality of Urk; Province of Flevoland.
6. Stakeholder analysis

Main stakeholders interviewed within the fisheries sector included:

- Jacob Kramer; Directeur North Seafood. www.fishcenter.nl
- Teun Visser; Director Fish auction hall Urk. www.visveilingurk.nl  Westwal 2, 8321 WGUrk  0527 689789
- Geert Meun; Secretary of VisNed and PO Urk. Vlaak 12 Urk.  www.visned.nl
- Johan Nooitgedagt; Chairman of PO Vissersbond. www.vissersbond.nl
- Derk Jan Berends; Secretary of PO Ijsselmeer. www.vissersbond.nl

Interviews were also conducted with key stakeholders interviewed outside the sector in the wider community:

- Wouter Weyers; Chamber of Commerce Gooi en Eemland en Flevoland, afd. EZ. www.kvknl
- Fred Jonkhart. Province of Flevoland . [Fred.Jonkhart@flevoland.nl]

Main stakeholders interviewed from the local government include:

- Jaap Kroon; Mayor of Urk
- Ben Visser; Aldermen Fisheries and Economic affairs
- Wilbert de Olde; Policy official Economic affairs
- Philip ten Napel; Policy official fisheries and tourism/Coordinator As 4 from EVF www.urk.nl

7. Qualitative interpretation and analysis

The development and diversification analysis described below is conducted by LEI-DLO to explore the factors behind the observed changes in the community development and diversification over ten years.

The analysis explores the observed trends in development and diversification to generate more qualitative analysis of the factors that have enabled and constrained community development and diversification, and the role of public investment in this. This analysis will build on and make use of the quantitative and qualitative information collected by LEI-DLO.

The analysis is conducted through a combination of two methods.

1. Two focus group discussions involving a group of representatives of the fishing sector and a group of the wider community of Urk.
2. One individual interview with a policy official of Urk

The discussion with the focus groups was structured around the main sections of the data collected and presented in Section 2-5 of the report i.e.:
• Demographic aspects – trends factors within the community to do with education, culture, migration etc.

• Economic aspects – overview of local economy (not fisheries-specific)

• Fisheries and aquaculture sector aspects – trends in fleets, stock status, infrastructure, and economic and social issues related to catching, processing, ancillary and aquaculture sub-sectors

• Governance aspects – trends and factors such as representative organisations, public support, etc.

The results of the data collected were presented for information, validation and completion. Extra data collected during the discussions has been added into the relevant section of the report

7.1 Key events and drivers of change

Demographic aspects

The population composition in Urk is different from that of the Netherlands overall. The population is much younger and especially men do not live to older ages, due to a relatively unhealthy life style. Unemployment is high for younger members of the population and the high numbers of young adults around the village weekend evenings is of concern to most village members. Women in their late 20s and upward have tended (and still do to a lesser extent) to begin working (e.g. in processing industry) as soon as they finish school (at 16 years of age); this means they lack higher and more specialised degrees, preventing them from seeking out work, even if their traditional culture did not prefer they remain home as homemakers. Most, however, stop working after marriage and the arrival of children. This is particularly true of the fisheries subgroups of the community.

Economic aspects (all sectors)

Urk is working to diversify its economy. Some new enterprises have been started in the village. Tourism is growing, though faces limits as they attempt to cater to tourists, yet maintain their traditional culture. There are more commercial service enterprises. International trade in fish is growing.

Fisheries and aquaculture aspects

Especially events outside of Urk have caused and started trends or resulted in any ‘step changes’ in the past 10 years. Main events are decreasing quota and increasing fuel prices that caused lower incomes for the fishing sector. Since fishermen share their revenues from the landings minus the costs, there have been numerous cases where fishermen went home after a fishing trip without any wage. It also caused a decrease in number of fishing vessels, supported by decommissioning schemes in 2002, 2005 and 2008.

Another important ‘event’ is the fact that NGOs are becoming more visible and powerful in Dutch society, while lobbying for sustainable fish and fishing methods. Due to the beam trawl technique that is considered as environmentally unfriendly (bottom disruptive and many discards) NGOs lanced a negative fishing sector image. Also the introduction of the Good Fish indicator that indicated plaice and sole, the main species caught by the Urker fleet, as ‘orange’ or ‘red’, meant a blow to the fishing sector.
Because there was less flatfish landed, the processing industry and fish trade had capacity left to import other fish, like *pangasius*, this meant an increase in competition for especially plaice. The price for plaice decreased.

Next to this the credit crisis caused banks not be as generous as before in lending money for investments, and in fact only one bank of five in Urk now lends out to the sector. This consequently is causing problems to finance new innovative vessels. This credit crisis is also a problem for buyers of fish.

The aquaculture sector is not very successful in Urk with only one business running and another in the planning stages. Also, the inland fishery is decreasing due to the recovery plan for eel.

**Governance aspects**

In the Dutch *Biesheuvel* system of co-management, individual fishermen bring their quotas and days-at-sea entitlements into defined groups but remain proprietors; they are responsible for establishing annual fishing plans to achieve a better distribution of days-at-sea and quota uptake across the year (van Ginkel n.d.). The Fish Board must approve of the fishing plans and determine how the group quotas will be allocated and how and when they will be caught. Members may buy, sell, lease, rent or exchange individual quotas throughout the year5

There are many, competing stakeholder groups in Urk and not all POs cooperate well with each other, causing tangible difficulties for the community. It means Urk “speaks” in different voices to government, weakening the community’s strength and voice.

In recent years, different public funding projects were realised to stimulate the fishing economy and tourism.

### 7.2 Adaptation

**Demographic aspects**

There is a tendency for higher educated Urkers to leave the village. This is probably due in part to the need to find appropriate jobs that are not available at Urk, as well as to the broadening of viewpoints and acceptance that some must move out of the community. This was not a usual occurrence in the not-so-distant past.

**Economic aspects (all sectors)**

Diversification is slowly continuing. New employment opportunities are occasionally found in the surrounding region in the carpet industry, inland navigation, on push tugs, in the sand and dredging industry, shipbuilding, commercial services and tourism.

**Fisheries and aquaculture aspects**

In recent years the strong assumptions that fishermen’s sons automatically become fishermen themselves is changing. Nevertheless, most fishermen’s sons want to become fishermen; the desire to fish remains strong. Additionally, Urker people have a strong work ethic, and are well known for this attitude. On the one hand we see fishing families still going strong, investing since 1987 into fishing vessels from abroad and fishing on quota of those

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5 van Ginkel, R. n.d. “Draft Chapter 6: Commission Cooperation: Fat and Lean Years” in his monograph *Braving Troubled Waters: Sea Change in a Dutch Fishing Community (Texel) and Beyond.*
specific countries. Other (or the same) families invest in other fishing methods and go after other species than flatfish alone. This flexibility is well known for Urker fishers and they are proud of their reputation for adaptation and survival. This “miracle of Urk” is well known in the Netherlands: In 1932, the Afsluitsdijk Dike was closed, beginning the process of turning the Zuider Sea into a freshwater Lake Ijsselmeer. As a part of this development, the island of Urk joined the mainland in 1942 through land reclamation. Whilst other fishing communities on the new lake turned to industries other than fishing, such as carpet making, people in Urk turned their attention to the North Sea as a way to continue their way of life. Fishing, as often pointed out in the literature, is more than an income-earning occupation, it is a cultural way of life. As such, the traditions, institutions, and structures impact all aspects of daily life for fishers, their households, communities and the individual and collective identities thus formed. Thus, these cultural preferences and institutions must be considered to truly understand the impact of measure and changes on the local community.

Currently, some Urk fishing families are investing in more environmental friendly fishing vessels and gear, like pulse trawl, sumwing, flyshooting, and twinrig, abandoning the beam trawl technique. Some enterprises with foreign vessels have begun market their fish directly - a more profitable way than through the auction. Dutch Urker fishers are trying to invent solutions for the voluntary agreed auction duty under the co-management regime that started in 1993 in order to also start more lucrative trade relationships. This is still to be worked out, however.

The Urker fleet is also attempting to obtain MSC certification for flatfish. One foreign Urker enterprise already succeeded in this, while another obtained the responsible fishing scheme certificate.

The Dutch government is stimulating innovation in Dutch fisheries, through working-learning groups (kenniskringen) and subsidies for innovative initiatives (VIP).

Main obstacles to change are low incomes and investment problems, because banks are more careful nowadays, causing an ageing fleet, although the fleet is not yet old relatively speaking.

Of those making changes, adopters of the flyshooting technique seem to be the “winners.” Also the traders and the processing industry seem to be winners in the outcome of the changes of the previous decade.

Diversification of the Urker economy partly absorbs crews that no longer fish. For instance in industries where one works 24 hours a day like in the carpet industry, fishermen are welcomed, because they are used to hard and difficult work, though not many from Urk choose to do this land-based work. Most ex-fishermen, if unable to fish, prefer to work in inland navigation, on push tugs, or work in the sand and dredging industry.

Governance aspects

Urk is well-organised in many platforms and other organisations that have influence on public funding and on fisheries issues, though given the aforementioned divisions are sometimes hampered by their inability to speak in one voice.

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7.3 Future development of the community

Demographic aspects

It is uncertain whether nuclear families will become smaller in the future, though there is a downward trend: for example, many Urkers in their late 30s who come from families with 13, 14, even 15 siblings, have themselves only 4 or 5 children. In 2007, the municipality projected the current population of 17 500 (2005) to rise to 40 000 by 2020. It can be assumed that such a change in the population will bring with it changes for the community.

Economic aspects (all sectors)

Economic growth will continue although a slowing tendency can be noticed. An increase of the exploitation of cultural heritage, and of knowledge of fishing, aquaculture, fish trade and processing needs to be stimulated to maintain a healthy and vibrant community.

Fisheries and aquaculture aspects

Trends towards a more sustainable fishing method, certification and aiming at other species than flatfish will continue. However, sole and plaice remain very important to Urk. Also the beamtrawl remains important for catching sole, there is not yet a suitable alternative technique for this. Urk has more plaice quota than sole quota and for this species, the twinrig seems to be very suitable. The Urker fleet will keep working to decrease dependency on fuel.

Recovery plans and MSY policy (2015) are considered to be a risk to Urk. In theory it should increase stocks and consequently landings or the quality of landings (larger fish); however this is yet to be seen. And it is questionable whether it will be seen in the future.

Urk is a community with many factions. In order to improve their success in an increasingly difficult fisheries world, fishermen need to put their difference behind them, put forth a united front to the outside world, and behave cooperatively.

For their future, Urkers hope for a culturally and economically sustainable fishing sector (including catching, processing and ancillary sub-sectors) which will maintain their way of life. Being highly dependent on a limited number of fish stocks, they are at risk to fluctuations in catches/landings and markets; they plan then to continue working on expanding the gear types they use in order to improves selectivity and reduce fuel consumption—making them not only more economically efficient but also improve their selectivity, and with it, their image. It is also very much hoped that the initiatives and plans for increased employment outside the fisheries sector bear fruit.

Discussions with the community have highlighted a number of priority areas for the fisheries sector which need to be addressed, and which correspond with the community’s vision of how a sustainable and viable the sector delivering increased employment can be supported.

First, they feel the negative image of fishing needs to be addressed. They acknowledge fishing practices must change, and view innovation (marketing, new gears, branding, etc.) and internationalism to be important in Urk’s future. They feel they can tap their cultural heritage and skills to get there, especially if they can cooperate on one image. With this in mind, they acknowledged Urkers need more vision and focus and better trust and government will. Finally, as a part of their image, they hope to find new ways to market quality North Sea products.
For this, however, financing is needed for: 1. innovation through cooperation; 2. Bottom up projects. Fishermen need a business economic mirror. These projects need to have the potential for a spin-off; 3. Regional orientation, combining knowledge on a regional North Sea product. And quite importantly, they prefer big projects over many small, unconnected projects.

7.4 The Role of public intervention in the past and in the future

Public intervention in the past drastically changed Urk making it, for example, a mainland harbour community on a freshwater lake, rather than the historical island community on the Zuider Sea that it was. More recently, such projects have been used to improve harbour facilities and decommission boats, such as in the beam trawl fleet. The success of such projects is debatable. Though 1.800.000€ have gone into aquaculture products and in new product lines, little can be seen in aquaculture in Urk. Additionally, the idea behind decommissioning boats (6.500.000€) is to get healthier stocks and increase the profitability of the remaining fleet. Yet, few measures taken for the Cod Recovery Plan and Long term Plaice and Sole management plans have been effective and the fishers feel their sacrifice has been for naught. Furthermore, decreasing fish prices due to import of competing fish (i.e. Pangasius) and increases in fuel prices mean they have yet to see the promised increased profitability.

For public intervention projects to be successful in the future, they must include vision and attention to future needs, not just stop-gap measures. Further quayside projects to develop the small tourism initiatives already in place will continue to be needed. The single shipbuilder in Urk works solely on pleasure craft now and investment in such ancillary sectors would strengthen the sector through strengthening them.

Training and re-training projects to increase social capital remain necessary; though will have greater impact if entrepreneurship initiatives and increasing new businesses are supported.

7.5 Conclusion

This case study on Urk, the Netherlands, show a classic example of a traditional fishing community which has limited alternative prospects in the future, though they are working hard to ensure this future is a bright one. Many of the challenges they face are due to their specialization on just a few stocks, the increasing independence of a processing sector no longer reliant on them to supply locally caught fish, and culturally preferences in their way of life and ways of doing things. With these constraining factors, and the additional hardship of limited TACs, forced decommissioning, low stock prices, and high fixed costs (fuel costs), the catching sector, and in turn the community, has been in decline. In 1980, it was estimated that 85 % of the community participated directly in the fisheries; in 2007 it had fallen to only 60 %.

Some in the sector have responded by using new marketing techniques and switching gears. Aquaculture has been attempted, though without much success. The processing sector continues to distance itself from the local catching sector by now relying on imported fish (50 %). This means, for the time being they are insulated from the difficulties of decreasing stocks in the North Sea.

Some fishers have begun to harvest other stocks, though this is limited by available TACs and restrictions on inland species and eel. Some skipper-owners have also begun direct sale of fish with sustainability certificates to increase their profitability, though these numbers remain few.
A great deal of funds were provided for decommissionings, though without increasing employment opportunities and strengthening support, the benefits won’t be seen at the community-wide level. For Urk, continued social support for entrepreneurship activities and training and tourist-related expansion of facilities of the community and harbour is needed.