Stakeholder Participation in the Polish Baltic Sea Commercial Fishing Fleet

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ABSTRACT

This article explores shifts in participation by artisanal Polish fishermen in management of the Atlantic cod (*Gadus morhua*) fishery since accession to the European Union. The European Union works to promote the long-term presence and influence of artisanal fishermen throughout Europe, and entering into the European Union system included an enhanced focus on stakeholder participation in Polish fisheries. However, impacts of this on artisanal fishermen have not been clear. For this project, shifts in participation by Polish artisanal fishermen in existing stakeholder forums were explored. A list of stakeholder groups in the Polish fishery was formulated, and stakeholders from multiple groups were interviewed about the fisheries management process. Participation by artisanal fishermen have experienced a marked increase in participation in the EU CFP system since accession in 2004. Although an increased number of potential spaces for them to participate exist, project participants did not identify artisanal fishermen as consistently or effectively active within them. This research is timely and important, because it addresses potential impacts of EU accession on artisanal fishermen in Poland. At the same time, descriptions of participation outlined in this paper are preliminary, and are meant to guide further inquiry into stakeholder participation in Polish fisheries management.

Keywords: Common Fisheries Policy, Commercial Fisheries, Stakeholder Participation, Poland, Baltic Sea

1. Introduction

Poland became a member of the European Union (EU) on 1 May 2004 (Figure 1). Since that time, Polish fisheries have been subject to regulation under the Common Fisheries Policy (CFP) (Figure 2). The EU CFP is increasingly guided by the Ecosystem Approach to Fisheries, or EAF (European Commission 2008; Damanaki 2010), which incorporates a human dimension into fisheries management (Garcia et al. 2003; Cowx and Aya 2011):

The purpose of EAF is to plan, develop and manage fisheries in a manner that addresses the multiple needs and desires of societies, without jeopardizing the options for future generations to benefit from the full range of goods and services provided by marine ecosystems (FAO n.d.a.).

A fisheries policy that incorporates EAF accounts for the socio-cultural and socio-economic worth of fishing by interpreting specificities about fisheries and the communities in which they take place.

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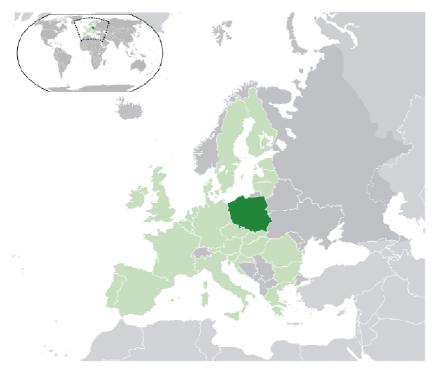


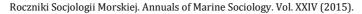
Fig. 1. Poland in EU Europe (NuclearVacuum 2009)

In addition to a shift towards EAF in Europe, there is a now large pool of literature highlighting the importance of artisanal fishermen (Figure 3) as stakeholders in fisheries throughout the world, both in scientific publications (Johannes 1981; Bene, Macfadyen and Allison 2007; Cochrane et al. 2011) and popular writing (Kurlansky 1997; Kurlansky 2008; Greenberg 2010). Artisanal fishing is defined as:

a...family type of enterprise (as opposed to an industrial company), most often operated by the owner...with the support of the household. The term has no obvious reference to size but tends to have a connotation of relatively low levels of technology but this may not always be the case... (FAO n.d.).

A rich pool of research demonstrates how entire coastal communities may be affected by changes in their artisanal fishing sector(s) (Whitmarsh, Pipitone, Badalamenti, and Anna 2003; Carothers, Lew, and Sepez 2010; Mansfield 2011; Carothers 2013). In addition, there is a growing body of research focusing on the local knowledge that fishermen possess, and how they may provide valuable input to managers (Neis and Felt 2000; Bergmann et al. 2004; Grant and Berkes 2007; Marshall 2007; Martin et al. 2007; Verweij et al. 2010; Carr and Heyman 2012; Beaudreau and Levin 2014).

The EU CFP works to promote presence and influence of artisanal fishermen throughout Europe (Borg 2009; Damanaki 2010; European Commission n.d.). Financial mechanisms are maintained to support fishermen and fishing communities (e.g., the Financial Instrument for Fisheries Guidance and the European Fisheries Fund). Further, vessels under ten meters in length are exempted from certain fishing rules (Eur-lex 1993; Eur-lex 2007), and the European Commission encourages increased political participation from individuals and groups at all levels. Stakeholders are encouraged to participate in the EU CFP policy system through attendance at Regional Advisory Councils, Fisheries Local Action Groups (FLAGs), EU-wide consultations for reforms, and other forums (CFP Reform Watch 2009).



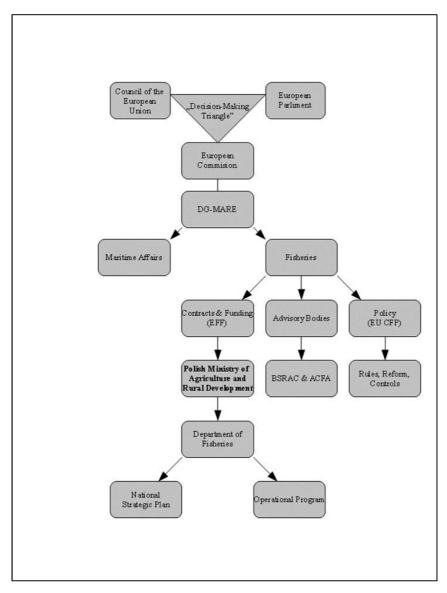


Fig. 2. Fisheries management in Poland (Figus 2012)

Ratner and Allison (2012) and Berkes (2003) argue that small-scale fisheries are best managed using context-specific assessments and collaborative approaches. Increasing stakeholder participation can increase the amount of information available to fisheries managers when creating and implementing policies.

The benefits of a policy that promotes the participation of artisanal fishermen throughout Europe are being explored (Reed 2008), but much remains to be done. Entering into the EU CFP system included an enhanced focus on stakeholder participation in Polish fisheries. However, impacts on artisanal fishermen have not been clear. A limited amount of research has been conducted on post-communist fisheries management in Poland (Jentoft and Marciniak 1991; Marciniak and Jentoft 1997; Delaney 2008), and there is a paucity of work concerning how effectively artisanal fishermen participate in the contemporary management system. This article explores shifts in participation by artisanal Polish fishermen in management of the Atlantic cod (*Gadus morhua*) fishery since accession to the EU.



Fig. 3. Polish artisanal fishing vessel, 2013 (Source: Author)

Poland's fisheries context

Since the 1980s and 1990s, Polish commercial fishing efforts have been centralized on Baltic Sea fishing grounds (Figure 4), so that today the Baltic fleet composes the majority of Polish national fishing efforts. The Polish Baltic coastline is 528 kilometers long, and has 74 recognized docking areas for loading, unloading and harboring vessels (Ministry 2008). Of the 74 docking areas, 50 are in communities that have access to the Baltic Sea. Ten of these are ports (large), ten are fishing shelters (medium), and thirty are landing sites (small).

Fishing rights are attached to vessels, and artisanal vessels make up the majority of the Polish cod fleet. In 2005, the Food and Agriculture Organization of the United Nations produced a report identifying artisanal vessels in Poland as those less than fifteen meters in length, of which there were 723 (FAO 2007). These were compared with non-artisanal "cutters" ranging from fifteen to thirty meters in length, of which there were 249. These parameters may not be exhaustive in grouping artisanal and non-artisanal fishing vessels, because a number of cutters between fifteen and twenty meters in length are family-owned, owner-operated businesses, with a multi-generational tradition of commercial fishing (Figus 2012). Therefore, some of these vessels fulfill the FAO definition of "artisanal," even though they may have main power capabilities reaching to over 300 kW, and may be made of wood, fiberglass or steel. Regardless of which length distinction is used to define this group, however, artisanal vessels are found in every type of docking facility, and comprise a majority of the Polish fleet.



Fig. 4. Map of Polish Baltic Sea coastline (NormanEinstein 2006)

Artisanal fishermen in the Polish cod fleet have the opportunity to participate in a number of forums related to managing their fishery (Table 1). Of these, each forum plays a different role in influencing the creation and implementation of management strategies. The International Council for the Exploration of the Seas, and the Scientific, Technical and Economic Committee on Fisheries are primary sources of scientific advice for European Commission decisions related to fishing regulations, and have designated participants. Artisanal fishermen are limited to observational roles at meetings of these scientific groups. The Advisory Committee on Fisheries and Aquaculture (ACFA, now disbanded) was formed through the EU CFP in 1971, as an EU-wide stakeholder forum. Poland had no official representatives in the ACFA during 2011 or 2012, when this research took place. Artisanal fishermen were therefore limited to observational roles at open meetings of the ACFA at that time.

Forum Name	Geographic Base
The International Council for the Exploration	International
of the Seas	
The Scientific, Technical and Economic	International
Committee on Fisheries	
Advisory Committee on Fisheries and	International
Aquaculture	
The Baltic Sea Regional Advisory Council	Regional
The Baltic Sea Fishermen's Network	Regional
World Wildlife Fund Round Tables	National
Fisheries Local Action Groups	National
Producer Organizations	National
Spontaneous Action/Protests	Combination

Tab. 1. Forums for Participation

The Baltic Sea Regional Advisory Council—now the Baltic Sea Advisory Council—was started in 2006 as a membership-based EU regional group for increasing stakeholder participation. The Baltic Sea Advisory Council hosts multiple meetings each year in different countries around the Baltic, some of which are open to individual fishermen. The Baltic Sea Fishermen's Network is an unofficial Baltic Sea regional network open to fishermen from multiple nations (Tschernij n.d.). The Network facilitates discussion between individual fishermen, and hosted meetings during 2011 and 2012.

World Wildlife Fund Round Tables are multi-annual meetings open to the public in Poland, which function as a space for Polish stakeholder groups to communicate with one another (WWF n.d.). Fisheries Local Action Groups (FLAGs) are an EU program of stakeholder groups formed to distribute development funding in fisheries-dependent communities (European Commission n.d.a.). Producer organizations are nationally-based industry groups formed to represent the interests of commercial fishermen throughout the EU. According to the European Commission:

[Producer organizations] are designed to enable producers (whether they catch and/or farm fish) to cooperate to manage their resources in a way that makes economic, as well as ecological, sense...Only producers who belong to a PO have access to the EU's price support scheme (European Commission 2012).

Polish producer organizations have representatives on the Baltic Sea Advisory Council, at the World Wildlife Fund Round Tables, and have been present in the Baltic Sea Fishermen's Network. In this way, they function both as a stakeholder group and forum for participation in Poland. Producer organizations have been offered 100% funding from the EU in order to build and control Local First-Sale Centers for selling cod along the coastline (Ministry 2008; ISAP 2010 Article 3.2). The final forum in Table 1, Spontaneous Action/Protests, encompasses unofficial ways for stakeholders to voice their opinions. This includes picketing and protesting both within Poland and elsewhere (e.g., outside the European Parliament).

2. Methods

For this project, shifts in participation by Polish artisanal fishermen in existing stakeholder forums were explored. A list of stakeholder groups in the Polish fishery was formulated, and stakeholders from multiple groups were interviewed about the fisheries management process. Participation by artisanal fishermen over time was then qualitatively analyzed.

In order to formulate a list of stakeholder groups, a list of stakeholder *types* was first compiled using examples from: the Advisory Committee on Fisheries and Aquaculture, Regional Action Councils, and CFP Reform Watch (Figure 5). Stakeholder types share interests in terms of voicing the issues they consider important. Poland-specific stakeholder *groups* were then determined for each type (Figus 2012). Table 2 presents a list of seven stakeholder types and 26 stakeholder groups identified in Poland. Some of the groups in Table 2, like producer organizations and FLAGs, may include overlapping membership at localized levels. Other groups, such as Tourism or the National Sea Fisheries Institute in Gdynia, represent all people who support this industry or institution.

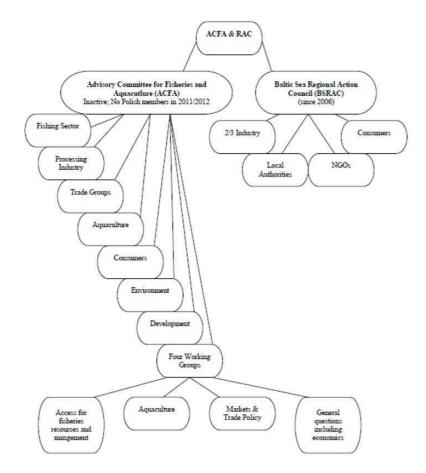


Fig. 5. Stakeholder types in the EU (Figus 2012). The ACFA was composed of 21 representatives for all nations in the EU CFP (CFP Reform Watch 2009). The BSRAC included a variety of Polish members in 2011 and 2012 (Baltic Sea RAC n.d.).

Data collection

Data for this exploratory research was collected during semi-directed interviews (Guion, Diehl, and McDonald 2011) with stakeholders in Polish coastal fishing communities. Location, language, and documentation formats of interviews were flexible, to maximize the number and depth of responses. However, all interviews were based one of two interview guides.

The first guide focused on each interviewee's: personal history; perceptions of fisheries management; experiences with the fisheries management system and recommendations for the EU CFP management system. The second guide was prepared specifically for Fisheries Local Action Group (FLAG) representatives. FLAG representatives were sought out because at the time of fieldwork, Poland accounted for the highest amount (40%) of the total FLAG budgets (€235 million) for the entire EU (Farnet 2010). FLAG representatives were asked to describe:

- personal histories;
- the role of FLAGs and of their FLAG in particular;
- the role of fishermen in their FLAG; and
- outlooks for the future of the FLAG program.

All interviewees were asked to describe general trends in fisheries funding programs/distribution across stakeholder groups and participation in stakeholder forums (Table 2). Interviewees were also encouraged to talk about their perceptions of other groups.

Tab. 2. Fisheries Stakeholder Groups in Poland. Bold text in Table 2 refers to stakeholder groups that were represented through interviewees during the course of this research.

- 1. Oceans users
 - a. Commercial Industrial Vessel Owners
 - b. Commercial Artisanal Vessel Owners
 - c. Fishing Vessel Captains/Crew
 - d. Recreational Fishing Vessel Owners
- 2. On-Shore Industries
 - a. Fish Processors
 - b. Fishing Gear Producers
 - c. Fish Marketing/Sales
 - d. Tourism
- 3. Trade Groups
 - a. Producer Organizations
 - b. Other Fisheries Associations
- 4. Authorities
 - a. National Government
 - b. Maritime Administrative Offices
 - c. Department of Fisheries
 - d. Regional Inspectorates
- 5. Community Interests/Local Development
 - a. Individual Community Members & Local Businesses
 - b. Fisher Families
 - c. Fisheries Local Action Groups (FLAGs)
- 6. Science & Research
 - a. National Sea Fisheries Institute in Gdyniab. Universities
- 7. Environment & NGOs
 - a. World Wildlife Fund
 - a. world wildlife Fullb. OCEANS2012
 - c. BalticSea2020
 - d. The Helsinki Commission
 - a. The Heisinki Commission
 - e. Hel Marine Station & Seal Aquariumf. Cormorant Reserve in Katy Rybackie
 - a Eich & Marina Life
 - g. Fish & Marine Life

Interviewees were selected using a mixture of sampling techniques described by Babbie (2007): *systematic*, planned meetings with FLAG and producer organization representatives; *random*, visits to docking facilities; and *snowball*, recommendations from systematic and random interviews. All interviews were conducted using the empathetic approach (Denzin and Lincoln 2008). This approach frames interviews within the context of a collaborative conversation, rather than a one-sided question and answer session. Empathetic interviewing allows researchers to humanize themselves, and to interact honestly and openly with each participant.

The initial project goal was to interview at least one person from each stakeholder type and people from as many stakeholder groups as possible during the two-month time period allotted for fieldwork. Thirty-eight of the fifty registered coastal fishing communities in Poland were visited during the fall/winter of 2011. Thirty semi-directed interviews were conducted, of which eighteen were recorded and twelve were unrecorded. Interviewees came from six of seven stakeholder types and fourteen of twenty-six stakeholder groups (in bold in Table 2). Twenty-six interviews were conducted in Polish, and four interviews were carried out in English. Thirteen of the thirty interviews were conducted with artisanal fishermen. Stakeholder type, Authorities, was the only one not represented by interviewees in the

project. Publicly available opinions of Authority stakeholder groups about participation were taken into account during analysis.

Interview Analysis

After fieldwork, interviews were analyzed using inductive content analysis (Quinn Patton 2002). Inductive content analysis is a way to code qualitative data into increasingly specific groupings. For this project, each interview was first summarized in English, based on how the interviewee responded to questions from each interview guide. Interview summaries were then organized into bulleted lists, by theme (Figus 2012). Participation-related themes were aggregated and recurring responses were grouped together. Finally, themes raised in interview summaries were supplemented with information gathered from the European Commission Fleet Register (European Commission 2013), literature review, and on-site observations (in communities, at five fisheries-related conferences attended, and at stakeholder forums). Results are not representative of all stakeholders in the Polish fishery, but instead summarize viewpoints of the individual interviewees who took part in the project.

3. Findings

Interview responses relating to the participation of artisanal fishermen in the management process were grouped into six recurring themes: forums for participation; perceptions of funding opportunities; communication; cooperation; culture; and independence.

Forums for participation

Interviewees from multiple stakeholder groups indicated that artisanal fishermen are inconsistently present in forums like the World Wildlife Fund Round Tables, Baltic Sea Regional Advisory Council, and Baltic Sea Fishermen's Network. They are most active in Spontaneous Action/Protests. On-site observation and interviews indicated that representatives of producer organizations are active in multiple forums, but artisanal fishermen tend to be less active than industrial fishermen within these organizations. Interviewees as a whole demonstrated mixed perceptions about producer organizations. Non-artisanal interviewees tended to describe producer organizations as a positive support framework. Artisanal fishermen interviewees were more likely to voice feelings of disconnect from all types of organizations, regardless of whether or not they maintained membership within one.

There was a general perception that the goals of producer organizations are primarily economic. Some interviewees saw this as a positive thing, while others felt that it was negative. One interviewee saw producer organizations as a form of positive support for fishermen. Another interviewee explained that there are conflicts within producer organizations, and another felt that producer organizations do not work for the interests of artisanal fishermen. Interviewees from multiple groups highlighted competition between producer organizations in Poland as a barrier to successful fisheries management.

Fishermen not functioning under the umbrella of a producer organization have limited ways to participate in the policy system. Artisanal fishermen who are members of fisheries associations outside the EU producer organization system (such as the Polish Fishermen's Union) have few opportunities to receive financial support for their activities. They may have representatives present at World Wildlife Fund Round Tables, and be active in the media. However, they are not officially recognized, like producer organizations.

Artisanal fishermen who are not members of a producer organization have the opportunity to attend World Wildlife Fund Round Tables, attempt to get invitations to closed Advisory Council meetings, attend the Baltic Sea Regional Advisory Council and open conferences related to maritime issues, and protest in Poland or Brussels. However, these actions must be carried out at their own expense. Interviewees from all groups tended to indicate that artisanal fishermen have financial difficulties and limited free time.

FLAG representatives that were interviewed stressed that FLAGs in Poland focus on the communities they work within, not just on the fishing industry. They saw FLAGs as a community development framework that includes fishermen and fisheries representatives as members, but stressed that FLAGs are not just about fishing. Instead, the program functions as a space for coastal community members to work together on general development projects.

Funding opportunities

Artisanal fishermen interviewees were less likely than other interviewees to indicate feeling well-informed about EU CFP funding opportunities. They tended to highlight negative aspects of funding programs, and some voiced feelings of distrust toward the funding system.

Project interviews took place during the last year of a 3-year period of paid, forced cessation for most of the fleet (called Trójpolówka), so all artisanal fishermen who were interviewed were affected by this type of short-term subsidy. Non-fishermen interviewees tended to critique these short-term subsidies primarily as a drain on public funds, while artisanal fishermen were more likely to highlight the negative social impacts of forced cessation. Some non-fishermen interviewees indicated their perception that such subsidies are positive for artisanal fishermen, because it means they get paid to take time off from working. Artisanal fishermen, however, tended to express their discontent with a system that forced them to stop working. Some artisanal fishermen interviewees also indicated that the subsidies prevented them from participating in the occupation that gives them satisfaction, and made them feel uncertain about the stability of their occupation in the future.

Communication

Interviewees from multiple stakeholder groups highlighted low levels of communication as a problem, both within Poland and between countries bordering the Baltic Sea. One interviewee explained that poor communication between national government officials and fishermen during the implementation of new regulations leads to misunderstanding and mistrust. Another interviewee pointed out that language barriers continue to pose challenges at international stakeholder forums. Other interviewees referenced a general lack of reliable information as a barrier to successful management. Two interviewees stressed the importance of improving communication between stakeholder groups as a key step toward improving fisheries management.

Cooperation

Cooperation was a common theme among interviewees. Although some references to conflicts between stakeholder groups were expected at the onset of this project, five interviewees also specified a trend of low levels of cooperation *among* fishermen. One interviewee indicated that conflicts are an inherent characteristic of commercial fisheries, while two others suggested that increased cooperation could improve fisheries management.

Culture

Some interviewees had negative opinions of EU membership in general. Most interviewees described their perceptions in the context of Poland's communist past and status as a Central European nation. This indicates a potential for culturally specific responses to EU accession and the EU CFP. One fisherman explained that although it was difficult to deal with the EU CFP, Poles were "learning" how to function in the new system. Another fisherman interviewed felt that further cultural changes would be necessary in order for Poles to improve management of the cod fishery as an EU member state.

Independence

Given the goal of this research, a common reference to independence in interviews presented an important caveat. Artisanal fishermen interviewees tended to highlight the value they assign to independence in their work, and some cited independence as a primary reason they had chosen fishing as a career. In addition, some of the artisanal fishermen interviewed indicated that they had a negative view of fisheries organizations or of the government in general. One non-fisherman interviewee felt that artisanal fishermen do not want representation in the management system. Some interviewees who highlighted the importance of independence also explained that they would prefer that artisanal fishermen were exempted from the EU CFP. This suggests that shifts in the participation, or lack thereof, may be related to the perceptions that artisanal fishermen have about the management system.

4. Discussion

Interview responses did not suggest that artisanal fishermen have experienced a marked increase in participation in the EU CFP system since accession in 2004. Although an increased number of potential spaces for them to discuss, critique, and inform management exist (in the forums for participation described in this paper), project participants did not identify artisanal fishermen as consistently or effectively active within them. Perceived increases in effective participation may be skewed because new forums created since accession to the EU (e.g., producer organizations, the Baltic Sea Advisory Council) for participation tend to include a similar core group of actors as those who participated in management discussions before accession. In other words, the stage has changed, but most of the actors are the same¹.

Artisanal fishermen and coastal community residents take advantage of options for support and organization, but are seldom active beyond their own local sphere of interest. It is uncommon for artisanal fishermen to be engaged in fisheries management at national or international levels on a regular basis. Although producer organizations work to promote fisheries interests in Poland and internationally, artisanal fishers interviewed for this project did not tend to be very active within them.

If efforts to increase stakeholder participation in Polish fisheries management have led to a structure of stakeholder participation similar to that which existed before accession, one driver of this could be *transition fatigue* (Rovelli and Zaiceva 2009). Transition fatigue describes a type of "burnout exhaustion" resulting from fast-paced changes in all the governments and economies of Central and Eastern European countries since 1989, as well the newer pressures of European integration (Rupnik 2010). Many project interviewees expressed a general discontent with the fast, but unstable pace of changes in both economic and political aspects of fisheries management in Poland. Some fishermen interviewees explained that it was difficult to plan for the future of their business without long-term funding or regulatory schemes in place. Others also expressed distrust towards the EU CFP system. This does not suggest that creating more funding opportunities or forums for participation will automatically fix this problem.

Future research

This research is timely and important, because it addresses potential impacts of EU accession on artisanal fishermen in Poland. At the same time, descriptions of participation outlined in this paper are preliminary, and are meant to guide further inquiry into stakeholder participation in Polish fisheries management. It remains unclear how participation by artisanal fishermen in Poland may be increased within the EU CFP system. Reed (2008) argues that while it is clear that processes (in this case, the EU CFP system) are, "most commonly blamed for failures that have led to disillusionment in stakeholder participation," this relationship is poorly understood. Research concerning the impacts of stakeholder participation as a process for decision-making is much needed. In Poland, further research might explore potential relationships between assigning value to independence and the participation of artisanal fishermen in fisheries management.

More broadly, existing avenues for information-gathering might be expanded to include more input from artisanal fishermen without significantly increasing management

¹ An exception to this pattern might be the World Wildlife Fund, which has become increasingly influential in Polish fisheries issues since 2004. The World Wildlife Fund has been a stakeholder group in international environmental issues since the 1960s, and has been active in Poland since the 1990s. Their focus has since expanded to include Baltic Sea fisheries issues.

costs. For example, more effort could be directed to collecting information from fishermen that receive financial assistance (including vessel scrapping programs). This information might then be utilized to direct funding opportunities and implement regulations more efficiently.

Bibliography

- Bene, C., Macfadyen, G., Allison, E.H. (2007), Increasing the contribution of small-scale fisheries to poverty alleviation and food security. FAO Fisheries and Technical Paper 481. Rome. ISBN 978-92-5-105664-6.
- Babbie, E. (2007), *The Practice of Social Research, Eleventh Edition*. Belmont, CA: Thomson Higher Education.
- Baltic Sea RAC. n.d. Members of the Executive Committee. Baltic Sea RAC.
- http://www.bsrac.org/ooizzCMS/DA/members/executivecommittee. Accessed 25 April 2012. Beaudreau, A., Levin, P. (2014), Advancing the use of local ecological knowledge for assessing data-
- poor species in coastal ecosystems. *Ecological Applications*. http://dx.doi.org/10.1890/13-0817.1
- Berkes, F. (2003), "Alternatives to conventional management: Lessons from small-scale fisheries". *Environments* 31(1): 5-19.
- Bierndgarski, H. (2010), "Rybacy będą mieli problem ze sprzedażą ryb." *Dwumiasto.pl.* 19 October. http://www.dwumiasto.pl/Wydarzenia/Biznes/Rybacy-beda-mieli-problem-ze-sprzedazaryb. Accessed 24 April 2012.
- Borg, J. (2009), Member of the European Commission Responsible for fisheries and maritime affairs "A new era of co-operation." Europa Press releases RAPID. 1 September. http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/09/356&format=HTML &aged=0&language=EN&guiLanguage=en. Accessed 21 April 2012.
- Carothers, C., Lew, D.K., Sepez, J. (2010), "Fishing rights and small communities: Alaska halibut IFQ transfer patterns". *Ocean and Coastal Management* 53: 518-523.
- Carothers, C. (2013), "A survey of US halibut IFQ holders: Market participation, attitudes, and impacts". *Marine Policy* 38: 515-522.
- Carr, L.M., Heyman, W.D. (2012), "It's About Seeing What's Actually Out There": Quantifying fishers' ecological knowledge and biases in a small-scale commercial fishery as a path toward comanagement". Ocean & Coastal Management 66: 118-132.
- CFP Reform Watch. (2009), Scientists and Stakeholders. *CFP Reform Watch; Follow the common fisheries policy online*. 17 December. http://cfp-reformwatch.eu/2009/12/scientists-and-stakeholders/. Accessed 21 April 2012.
- Cochrane, K.L., Andrea, N.L., Parma, A.M. (2011), "Primary fisheries management: A minimum requirement for provision of sustainable human benefits in small-scale fisheries". *Fish and Fisheries* 12(3): 275-288.
- Cowx, I.G., Aya, M.P. (2011), "Paradigm shifts in fish conservation: moving to the ecosystem services concept". *Journal of Fish Biology* 79: 1663-1680.
- Damanaki, M. (2010), Maria Damanaki Member of the European Commission, responsible for Maritime Affairs and Fisheries "Poland as a key player in the future of European fisheries and maritime affairs" Presidium of the Parliamentary Committees on European Affairs, Infrastructure and Agriculture and Rural Development Warsaw, Poland, 22 July 2010. *Europa Press releases RAPID*.

http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/10/401&format=HTML &aged=1&language=EN&guiLanguage=en. Accessed 21 April 21, 2012.

- Delaney, A.E. (2008), Profiling of small-scale fishing communities in the Baltic Sea: A study requested by the European Commission. Aalborg University Research Centre.
- Denzin, N.K., Lincoln, Y.S. (2008), *Collecting and Interpreting Qualitative Materials, Third Edition*. Thousand Oaks, CA: Sage Publications, Inc.
- Eur-lex. (1993), Council Regulation (EEC) No 2847/93 of 12 October 1993 establishing a control system applicable to the common fisheries policy. 12 October. Official Journal L 261, 20/10/1993 P. 0001 – 0016. http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31993R2847:EN:HTML. Accessed 24 April 24, 2012.

- Eur-lex. (2007), Council Regulation (EC) No 1098/2007 of 18 September 2007 establishing a multiannual plan for the cod stocks in the Baltic Sea and the fisheries exploiting those stocks, amending Regulation (EEC) No 2847/93 and repealing Regulation (EC) No 779/97. September 22. *Official Journal L 248 P. 0001 0010.* http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=0]:L:2007:248:0001:01:EN:HTML. *Accessed 23*
 - lex.europa.eu/LexUriServ/LexUriServ.do?uri=0J:L:2007:248:0001:01:EN:HTML. Accessed 23 April 2012.
- European Commission. (n.d.), Environment, culture and society; "Material" and "Immaterial" investment in fisheries areas. *FISHERIES-Farnet*. https://webgate.ec.europa.eu/fpfis/cms/farnet/environment-culture-society. Accessed 21 April 2012.
- European Commission. (n.d.a.), Welcome to FARNET...the European Fisheries Area Network. *Fisheries-Farnet*. https://webgate.ec.europa.eu/fpfis/cms/farnet/node. Accessed 24 April 2012.
- European Commission. (2008), "Commission sets out position on ecosystem-based approach to fisheries." *Communication IP/08/566.* 11 April: Brussels.
- European Commission. (2012), Producer organizations. *Fisheries*. 12 February. http://ec.europa.eu/fisheries/cfp/market/producer_organisations/index_en.htm. Accessed 24 April 2012.
- European Commission. (2013), Advanced Search Poland. *Fleet Register on the Net*. http://ec.europa.eu/fisheries/fleet/index.cfm?method=Search.SearchAdvanced&country=PO L. Accessed 13 October 2013.
- FAO. (n.d.), Artisanal fisheries. *Fisheries Glossary*. http://www.fao.org/fi/glossary/default.asp. Accessed 21 April 2012.
- FAO. (n.d.a.), Eco-system approach to fisheries. *Fisheries Glossary*. http://www.fao.org/fi/glossary/default.asp. Accessed 21 April 2012.
- FAO. (2007), Fishery Country Profile FIC/CP/POL: Food and Agriculture Organization of the United Nations. May. ftp://ftp.fao.org/FI/DOCUMENT/fcp/en/FI_CP_PL.pdf. Accessed 11 May 2014.
- Figus, E. (2012), Silent Voices: The Polish Baltic Sea commercial fleet seven years after accession to the European Union (Master's thesis). Jagiellonian University: Krakow.
- Garcia, S.M., Zerbi, A., Aliaume, C., Do Chi, T., Lasserre, G. (2003), The ecosystem approach to fisheries. Issues, terminology, principles, institutional foundations, implementation and outlook. *FAO Fisheries Technical Paper*. No. 443. Rome: FAO.
- Greenberg, P. (2010), Four Fish: A Journey From the Ocean to Your Plate. London: Allen Lane.
- Guion, L.A., Diehl, D.C., McDonald, D. (2011), Conducting an in-depth interview. *University of Florida IFAS Extension*. August. Gainsville, FL: University of Florida.
- ISAP. (2010), Ustawa zdnia 5 grudnia 2008 r. o organizacji runky rybnego. *Kancelaria Sejmu.* http://isap.sejm.gov.pl/DetailsServlet?id=WDU20110340168. Accessed 25 April 2012.
- Jentoft, S., Marciniak, B. (1991), "Burning Bridges? Polish Fisheries Co-operatives in Times of Transition". *MAST* 4(2): 72-86.
- Johannes, R.E. (1981), "Working with fishermen to improve coastal tropical fisheries and resource management". *Bulletin of Marine Science* 31 (3): 673-680.
- Kurlansky, M. (1997), Cod: A Biography of the Fish that Changed the World. London: Jonathan Cape.
- Kurlansky, M. (2008), *The Last Fish Tale: The Fate of the Atlantic and our Disappearing Fisheries.* London: Jonathan Cape.
- Mansfield, B. (2010), "Modern" industrial fisheries and the crisis of overfishing. Chapter in: Global Political Ecology. Eds. Peet, R, Robbins, P, and M Watts. Taylor and Francis: US.
- Marciniak, B., Jentoft, S. (1997), "Fisheries management in post-communist Poland: prospects of userparticipation". Ocean and Coastal Management 34(1): 73-79.
- MIR. (2012), Projekty UE. *Morski Instytut Rybacki Państwowy Instytut Badawczy*. http://www.mir.gdynia.pl/?page_id=164. Accessed 27 April 2012.
- Ministry of Agriculture and Rural Development, Republic of Poland. (2008), *Operational Programme: "Sustainable Development of the Fisheries Sector and Coastal Fishing Areas 2007-2013."* October. Warsaw: Ministry of Agriculture and Rural Development.
- NormanEinstein. (2006), "Map of the Baltic Sea." This file is licensed under Creative Commons Attribution-Share Alike 3.0 Unported. Accessed 5 December 2013.
- NuclearVacuum. (2009), "Location Poland EU Europe.png." This file is licensed under Creative Commons Attribution-Share Alike 3.0 Unported. Accessed 5 December 2013.
- Ratner, B.D., Allison, E.H. (2012), Wealth, rights, and resilience: An agenda for governance reform in small-scale fisheries. *Development Policy Review* 30(4): 371-398.
- Reed, M.S. (2008), "Stakeholder participation for environmental management: A literature review". *Biological Conservation* 141: 2417-2431.

Rovelli, R., Zaiceva, A. (2009), Transition fatigue? Cross-country evidence from micro data, IZA discussion papers, No. 4224, http://nbn-resolving.de/urn:nbn:de:101:1-2009062250.

Rupnik, J. (2010), "In Search of a New Model". Journal of Democracy 21:1. DOI: 10.1353/jod.0.0146

Tschernij, V., (n.d.), The Baltic Sea Fishermen's Network to enhance dialogue and cooperation on practical issues. *A report from the conference Baltic Sea Forum 2009*.

https://docs.google.com/viewer?a=v&q=cache:GSdrC3YnCGsJ:www.bsrac.org/archive/Newsl etter/Week%25203-

%25204/BSFN%2520report%25202009%2520final.pdf+baltic+sea+fishermens+network&hl =pl&gl=pl&pid=bl&srcid=ADGEESgObKdkFliPwYMsceOmKnpzSN-

DFU4fc9txI9hKeefi3rVJE5kyeuG69ci3qdGRMGB68CGyxXaFm6IsiM2K7bSANgJXn4h2hz0Nr3x cWSzAkjM7cBCuXj1xBLCuzXZL4wHc7gJ9&sig=AHIEtbRW5haLWBxSXxZAbErsur43bCU4_g. Accessed 24 April 2012.

- Verweij, MC, van Densen, WLT and AJP Mol. (2010). The Tower of Babel: Different perceptions and controversies on change and status of North Sea fish stocks in multi-stakeholder settings. *Marine Policy*. 34: 522-533.
- Whitmarsh, D, Pipitone, C, Badalamenti, F, and G D'Anna. (2003), The economic sustainability of artisanal fisheries: the case of the trawl ban in the Gulf of Castellammare, NW Sicily. *Marine Policy* 27: 489-497.

WWF. (n.d.), Nasze działania. Poland.

http://www.wwfpl.panda.org/co_robimy/morza_oceany_glowna/zrownowazone_rybolowstwo/nasze _dzialania/. Accessed 24 A