

What's in it for Africa? EU fishing access agreements and exports

Fishing access agreements with developing countries have been widely criticized, for example for contributing to overexploiting fish resources and threatening food security. However, there is little quantitative evidence of their economic effects. We investigate how European Union (EU) fishing access agreements affect African partner countries' fishery exports to OECD countries. We find that:

- **Fishery exports to OECD countries are negatively affected when fishing access agreements are inactivated.**
- **Terminating fishing access agreements with the EU may therefore be a bad idea if one wants to promote fish exports.**
- **To increase welfare effects from fishery exports, agreements should continue to develop the management of fish resources in partner countries.**

Background

Fishing access agreements started to appear in the mid-1960s in the process leading to the establishment of the United Nations Convention of the Law of the Open Sea (UNCLOS) in 1982. UNCLOS regulates how the seas are used and states that all countries have exclusive economic zones (EEZs) reaching 200 nautical miles from the coast. Fishing access agreements range from joint ventures and chartering of foreign vessels to government-to-government agreements, and it is possible for a country to have several agreements with different partners. In the years preceding the signing of the UNCLOS, the EU started a process of signing fishing access agreements to be able to continue its fishing activities that, historically, were carried out off the African coast. The EU fishing access agreements with developing countries gave EU vessels the right to fish in partner countries' waters in exchange for financial compensation. The first agreement was signed with Senegal in 1979 and was followed by a number of agreements in the 1980s.

The motivation behind selling fishing rights has mainly been that developing countries without sufficient capacity to exploit fish resources get substantial compensations for allowing foreign vessels in their EEZs. The compensations are often important parts of their government budgets. However, the agreements may also be seen as means to develop the domestic fishery sector. For this reason, the agreements may require foreign fleets to land a specific amount of fish

locally, require a certain percent of the crew to be of host country nationality or specify that part of the compensation should be used for developing port infrastructure and marketing networks. An agreement may also provide funding for better monitoring, control of catches and research that help keep fishing activities at sustainable levels.

Development of EU fishing access agreements over time

There has been quite heavy criticism of the design of the agreements over the years. Agreements have often been associated with poor transparency, inequitable benefit sharing, conflicts with local fishermen and depletion of fish stocks. In response to the criticism, the agreements have been reformed with an increased focus on improved fishery management and host-country participation. The scope of the agreements has also changed. The early agreements often gave EU vessels access to many types of fish species and crustaceans, which sometimes resulted in conflicts with local fishermen fishing on the same stock. These agreements are called *mixed agreements*. Over time, *tuna agreements*, which mainly give EU vessels the right to fish tuna species, have become more common. Tuna is fished further from the coast, which implies that conflicts with local fishermen are largely avoided.

Fishing access agreements consists of two parts: the general agreement with general terms of contract and the protocol which contains more specific details. For example, the protocols state the number of vessels that are allowed to fish, the compensation to be paid and the species that can be fished. Protocols are time limited and must be valid for EU vessels to be able to fish in the partner country's EEZ. In 2018, there were 14 fishing access agreements between the EU and African countries (of which 11 had valid protocols). Only three of the 14 agreements were mixed agreements.

Possible trade effects

The aim of the analysis is to investigate if the EU fishing access agreements affect exports to developed countries using quantitative methods. Fishing access agreements are not trade agreements, that is, they do not explicitly aim to affect exports, but it is plausible that they do so through one or several of the following channels. First, agreements may make EU vessels land more fish in partner countries, which could increase local exportable supply. Second, if part of the compensation paid by the EU is used for investments in port infrastructure and marketing networks in partner countries, trade costs could decrease. For example, better port infrastructure makes it faster and cheaper to ship goods abroad. Investments in marketing networks could also make it easier to find contacts in exporting markets, which makes it cheaper to export to a new market. Third, the agreements could have a negative effect on exportable supply if EU vessels compete with local fishermen and do not land in partner countries. Fourth, if EU

vessels mainly catch fish that otherwise would not have been caught and do not land it in the partner country, the effect on exports of the catches of EU vessels may be insignificant. Hence, the existence, and direction, of a possible trade effect is an empirical question that deserves attention.

Aim

We assess the effect of active agreements becoming inactive on African partner countries' fish exports to OECD countries. Inactivation occurs when an agreement is terminated or when a protocol becomes invalid and means that the EU no longer is allowed to fish in the partner country's waters. We investigate how the inactivation of agreements affect both export volumes and the probability to export to OECD countries. Data limitations make it impossible to include all export destinations in the analysis. We focus on the OECD in order to work with reliable data that covers the main world fish importers during a relevant time period. Two questions guide our analysis:

- 1) Does inactivation of a fishing access agreement make partner countries less likely to export fish to the OECD, i.e. does the probability to export decrease?
- 2) Does inactivation of a fishing access agreement make partner countries export less fish than previously to the OECD, i.e. does the volume of exports decrease?

Data and method

Our data cover the period 1992-2010 and include total fish exports of 15 African partner countries to 23 OECD countries. All partner countries included in the study initially have an active fishing access agreement with the EU. To assess the impact of agreements becoming inactive on export volumes we compare the level of exports of the countries with inactive agreements with the level of exports of the countries with active agreements during the entire period of study. To assess the impact on the probability to export we compare the probability to export for these two groups of countries.

To identify the impact of inactivation of fishing access agreements on exports, other factors simultaneously affecting exports should be controlled for. To this end, we use the commonly used gravity model that presumes that trade volumes increase with economic size of countries and decrease with trade resistance. The main benefit of this analysis is that we are able to analyse the agreement effect on bilateral exports while keeping other factors constant. The gravity model is also estimated using a number of different estimation methods to make sure that the results hold.

Results

Our results show that export volumes from African partner countries to OECD countries decrease by 19-28%, depending on the estimation method used, when EU fishing access agreements are inactive. Our results also show that the probability to trade with OECD countries is reduced by 7% when EU fishing access agreements become inactive.

Further, we find that the effects of the two types of agreements, mixed and tuna, differ. A trade volume effect is found for both types of agreements but we only find an effect on the probability to trade for the mixed agreements. As the agreements are signed with EU countries it is plausible to assume that trade with the EU would be affected differently than trade with other OECD countries by agreement inactivation. However, we do not find any evidence to support this belief.

Furthermore, we investigate if changes in catches in the partner country waters could explain the decrease in exports. We find that changes in EU or other foreign catches do not affect exports while domestic catches positively affect export volumes. Importantly, including catches, domestic or other, in the estimations does not change the effect of agreement inactivation on exports. We also find that the size of the monetary compensation and earmarked funds for investments in the local fishing sector provided for within the agreements are positively related to exports. This suggests that the effect of the inactivation of agreements on exports mainly depends on the monetary compensations and not on changes in catches. This could also explain why mixed agreements that are larger in monetary terms, in contrast to tuna agreements, affect the probability to trade.

Estimating the effects of inactivation of EU fishing access agreements is associated with several challenges. For example, our sample includes countries where data collection is often poor or missing. During our period of study, more countries have become importers of fish, most notably China. The possibility to replace exports to the OECD with exports to other countries such as China could affect the interpretation of our results. We therefore perform a number of robustness checks to validate the results, and we find that our results are highly robust.

Concluding discussion

We found that an inactivation of EU fishing access agreements has a negative effect on fish export volumes from African partner countries to the OECD and a negative effect on the probability to export fish. Whether or not fish exports are beneficial for developing countries is debated. It has been highlighted that exporting fish from developing countries could have negative welfare effects due to overexploitation of fish resources and/or unequal benefit sharing. If fish resources are

overexploited, incomes from fish exports today risk to come at the expense of the sustainability of the fishery sector. It is well documented that fishery resources off the west coast of Africa are among the most overfished in the world. Weak institutions often make it especially challenging to monitor fishing activities and to enforce fishing regulations in partner countries. There is an evident risk that exports of overfished resources reduce long-term welfare.

A common fear is also that exporting fish from developing countries could negatively affect food access for the poorer part of the population. Previous research suggests that exporting fish does not generally negatively affect food security as exporting yields incomes that could be used to increase welfare. The main problem seems to be that export incomes are unevenly distributed and risk not reaching the poor.

We conclude that fish exports can contribute to a positive development in developing countries, but that proper redistribution of the export incomes as well as proper management of the fishery resources are needed. EU fishing access agreements could be one of the channels through which fish exports from developing countries are encouraged. Fish exports are already important for many developing countries, and could further contribute to economic growth and increased welfare. Our results suggest that terminating fishing access agreements with the EU may be a bad idea if one wants to continue to expand fish exports. Instead, it might be a good idea to develop the agreements with the aim of facilitating the development of institutional capacity in partner countries, for example by improved management of fish resources.

Authors	Anna Andersson and Cecilia Hammarlund
Source	Hammarlund, Cecilia and Andersson, Anna (2019) "What's in it for Africa? European Union fishing access agreements and fishery exports from developing countries", <i>World Development</i> 113, p. 172-185.
More information	<p>Anna Andersson Telefon: 046-222 07 85 E-post: anna.r.andersson@slu.se</p> <p>Cecilia Hammarlund Telefon: 046-222 07 91 E-post: cecilia.hammarlund@agrifood.lu.se</p>

The AgriFood Economics Centre

The AgriFood Economics Centre provides economic expertise in the fields of food, agriculture, fishing and rural development. The Centre, which consists of the Swedish University of Agricultural Sciences (SLU) and Lund University, is a platform for applied research. The aim is to supply government bodies with a solid foundation supporting strategic and long-term policy choices.

Publications

The AgriFood Economics Centre has three types of publications aimed at policy makers, authorities, stakeholders and the general public. A Policy Brief is a comprehensible summary of one of our scientific publications. A Fokus is a shorter analysis and a Report is a longer analysis (which is also available in print). In addition, AgriFood publishes working papers and articles in scientific journals aimed at the research community. Our publications can be ordered free of charge or downloaded at www.agrifood.se.

Contact

AgriFood Economics Centre
P.O. Box 730, S-220 07 Lund, Sweden
info@agrifood.lu.se
www.agrifood.se
