

# ***POSSIBLE IMPACTS OF SUSTAINABILITY INITIATIVES IN INTERNATIONAL BIOFUELS TRADE: ANALYSIS FROM CERTIFICATION EXPERIENCE IN OTHER ECONOMIC SECTORS***

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## **Overview**

In the international scenario, discussions and actions to reduce dependence on petroleum-based fuels and emissions of greenhouse gases are intense. In the short term, biofuels are seen as viable alternatives to achieve such goals and, thus, government incentives for use and production began to emerge around the world. With increased attention to such fuels, questions about their real contributing potential began to emerge, emphasizing the sustainability of production and conversion.

In this context, initiatives to ensure production of feedstock of biofuels, accomplishing sustainability requirements, rapidly expand. With such increase, it is argued whether these initiatives could configure restrictions to international biofuels trade as non-tariff trade barriers. At this point controversy lies, since there is no pacified position, on the available literature, of the character of certification schemes. While some argue that certification constitute trade barriers, impairing especially small producers, there are those who consider them developers of a fairer market.

The focus of the paper lies on the analysis of certification schemes in order to identify their impacts on biofuels international trade, namely if they act as barriers or catalyst for trade. The survey conducted, in order to verify the performance of certification schemes, compared experiences perceived in the food sector and, from the results obtained, a parallel was drawn to what could be expected with the introduction on certification schemes for biofuels.

## **Methods**

Regarding the methodology followed, the paper is descriptive and the survey compared the experiences perceived in a more mature and familiar field regarding certification schemes. The food sector was selected to make the comparisons and fifteen papers were used in the analysis. There was no selection regarding specific certification schemes or specific products and the focus of the analysis was on the economic impacts due to the adoption of the certification scheme. We strive to find facts that correspond to questions such as: (i) access/restriction to the international market; (ii) direct and/or indirect costs incurred by the producer in order to implement the certification scheme; and (iii) rise on the perceived price for the product after the adoption of the certification scheme.

## **Results**

The results found were varied; however, a recurring result worth mentioning was the need for financial and technical support for successful deployment of certification schemes. Among the positive outcomes, the following aspects could be highlighted: (i) increase of the perceived price for the product; (ii) increase exports (volume and value); (iii) increase in productivity. Negative results were mainly related to constrained access to international markets and, consequently, reduction of exports. Thus, economic advantages and disadvantages could be found arising from the adoption of certification schemes.

Decisive variables were identified for the implementation of a certification scheme to succeed. Among them, include: (i) financial resources to conduct mandatory adjustments; (ii) financial resources to handle recurring and non-recurring costs of the certification; (iii) adequacy of the scheme to the particular needs of the region and/or business. Comparative analysis found that, mainly for small producers, concerns arising from adoption of certification schemes are very similar. Need for incentives and support for adoption of the schemes and required adequacy of infrastructure, in addition to the variables mentioned above, are common for both sectors. Prices for the adoption of certifications were more prohibitive for poorest countries and small producers in both cases studied. Finally, in contrast to the verified for the food sector, biofuel producers have perceived lower prices than the expected for the certified product in most cases.

The performance of the World Trade Organization, in order to restrain the use of non-tariff barriers to trade, has been effective for the food and agricultural products sector. Regarding biofuels, as a younger market, considerations of certification schemes configuring trade barriers concentrate on academic and government studies. However, the first and only dispute, so far, related to biofuels, was filed by Argentina in 05/15/2013 (DS459) and is on the consultation phase.

## **Conclusions**

Biofuels have the potential to contribute to the reduction of GHG and oil dependency. However, this requires that production is conducted in a sustainable manner, so that pressures arising from increased use and production do not cause adverse effects. In order to ensure sustainability, certification schemes are effective tools, although, controversial. Identifying the use of such mechanisms for evaluating compliance as barriers to international trade

is very complex because the initiatives are comprehensive and varied. In addition, the implementation of certification schemes for biofuels are a relatively recent phenomenon, which justifies the need to further analyze the impacts that may occur.

The survey verified economic aspects such as: (i) access/restriction on international markets; (ii) increase/decrease in exports (values and volumes); (iii) access to credit; (iv) need of technical and financial support; (v) other financial benefits, in order to identify. This was done for, ultimately, understanding the actual impacts of the certification schemes, as barriers or catalysts to international trade.

Finally, both the additional barriers that can be imposed to trade and the economic impacts resulting from the adoption of certification schemes cannot be considered in a general manner, so, in order to be possible to assess their actual performance it is necessary to analyze them individually. A conclusion, deriving from the study, that can be highlighted, is that the definition of the role of the certification schemes, as barriers or catalysts for international trade, should be done carefully, taking into account the context involving the segment studied as well as the exporting country or region.

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