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FARMERS'S PROPENSITY TO ADOPT ELECTRIC VEHICLES IN THE AGRI-FOOD SUPPLY CHAIN

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Short Description

This study explores the intention of entrepreneurs operating in the Sicilian Short Food Supply Chain to adopt electric mobility in the transport system for their business.

Main part

This study explores the intention of entrepreneurs operating in the Sicilian Short Food Supply Chain (SFSC) to adopt electric mobility in the transport system for their business. EVs are seen as a viable and very promising alternative, especially if electricity is generated in a clean manner by using renewable energy sources (Egbue et al., 2017). To date, few no scholars have never attempted to assess the propensity of entrepreneurs operating in the SFSC in introducing EVs into their business activities. For this purpose, in order to fill this gap, an empirical survey has been carried out in order to investigate the main factors affecting the intention to adopt greener behavior among Sicilian SCFC farmers. Results show high levels of intention to introduce sustainable means of transport, such as electric freight vehicles, and that this behaviour is moderated by firm size, and entrepreneurial characteristics and knowledge about the benefits belonging to the adoption of electric freight transports. Furthermore, results indicate that a good portion of SFSC interviewed farmers usually orient their business decisions in order to fully achieve greener consumers' expectations, specifying that the adoption of greener transport means could be exploited in the long period in terms of brand image. Nevertheless, findings suggest that a lot of sector-based specific barriers are currently characterizing the adoption of e-means for freight transports, limiting a full adoption, and for this reason SFSC farmers hope for a greater public intervention for an effective resolution of these shortcomings. Major supports in this domain are then expected also because the overall SFSC system is characterized by small firms, often family firms, with reduced capital availability. The preliminary results here discussed to enrich the existing literature and provide interesting insights for SFSC entrepreneurs but also policymakers, paving the way for future research into this topic as well as more Government measures which fit with the real needs expressed by in field actors.

What is new?

The study enriches the literature on the intention of entrepreneurs operating in the Short Food Supply Chain to adopt electric mobility inside their business.

What is transferable to other cities and regions?

Recommendation for local policymakers for future planning sustainable urban systems.

What are outcomes and conclusions?

Results of this study highlight the need to reinforce the support to farmers during the decision-making process in order to make their choice cleaner.

Who are the main target groups?

Policy makers, farmers, local communities.

And what now? - what will change? - what is the relevance for the future?

The current COVID 19 pandemic is furtherly demonstrating to the world population the fragility of our earth and the urgent need to effectively preserve it. With a particular reference to the e-mobility and its potential diffusion among SFSC farmers, at least for delivering scopes, the results achieved with the present work acquire a new meaning today in terms of action plans and more sustainable commitment by SFSC farmers themselves.

We expect that the current COVID 19 pandemic and its relationships with atmospheric pollutants will promote a shift of today's business models towards more sustainable ones. This is true also in consideration of the expected growth of environmentally respectful foods. Indeed, we suppose that as a consequence of the pandemic also consumers will become more and more aware of the impacts of their daily actions, among which the transport system adopted, showing in the brief period a major preference towards food producers which not only produce in a greener way but also transport food locally through more environmental respectful modes.

In the agri-food sector, ensuring a global shift towards greener systems is a great challenge that successfully achievement will depend not only on farmers but also on the specific support from other stakeholders of the green value chain. So, a multi-actors effort is needed, today more than before, in order to accelerate those processes which should ensure easy adoption of e-mobility among SFSC farmers, ready to do that, if properly supported, from an economic and infrastructural level.

Link to the project

enernetmob.interreg-med.eu/