

Impact of Research on Development in Cameroon: convergence between supply and research needs in the food sector



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Objective and Hypothesis

Objective : is to analyse the convergence of research priorities to development issues.. in context of Low Development Country (LDC)

Hypothesis : There is a weak convergence between the research outcomes and business needs for innovation

Testing this hypothesis

In the agri-food sector of Cameroon

In two sub-thematic :

- a) environmental protection and
- b) improvement of the business climate

Contents:

1. Context and problem statement
2. Methodological framework
3. Main results
4. Recommendations and conclusion

1. Context statement of Cameroon

Rapid increase of population and local market in the food sector

Increase GNP (last 10 years) and transition Low Development Country (LDC)

=> Middle Income country (2014)

=> And hope emergence country

Structuration of National Innovation Systems (Lundvall, 2014) in relation between new research policies and innovation since 2014

And what is the problem ?

First, is inadequacy of conventional indicators of performance evaluation of STI in LDC (Casadella, 2015)

An action variable is to improve knowledge of the relationship between the themes of scientific research and demand of agribusiness

But in LDC missing information's, methodology, capacity for analyses these relationships..

How the supply of scientific knowledge meets the demands of the business sector?

2. Methodological framework

We analyse how research supply meets demand from a framework formalized by different authors : Sarewitz & Pielke.

The demand for research is approximated by the needs and research priorities indicators developed from survey on business managers.

The supply for research is approximated by relevance of scientific publications in the fields of Agri-Food and Environment (AFE).

Methodological steps

Firstly, we determine the indicators of the relevance of topics addressed in scientific production regarding :

- the improvement of the business climate
- and the environmental protection.

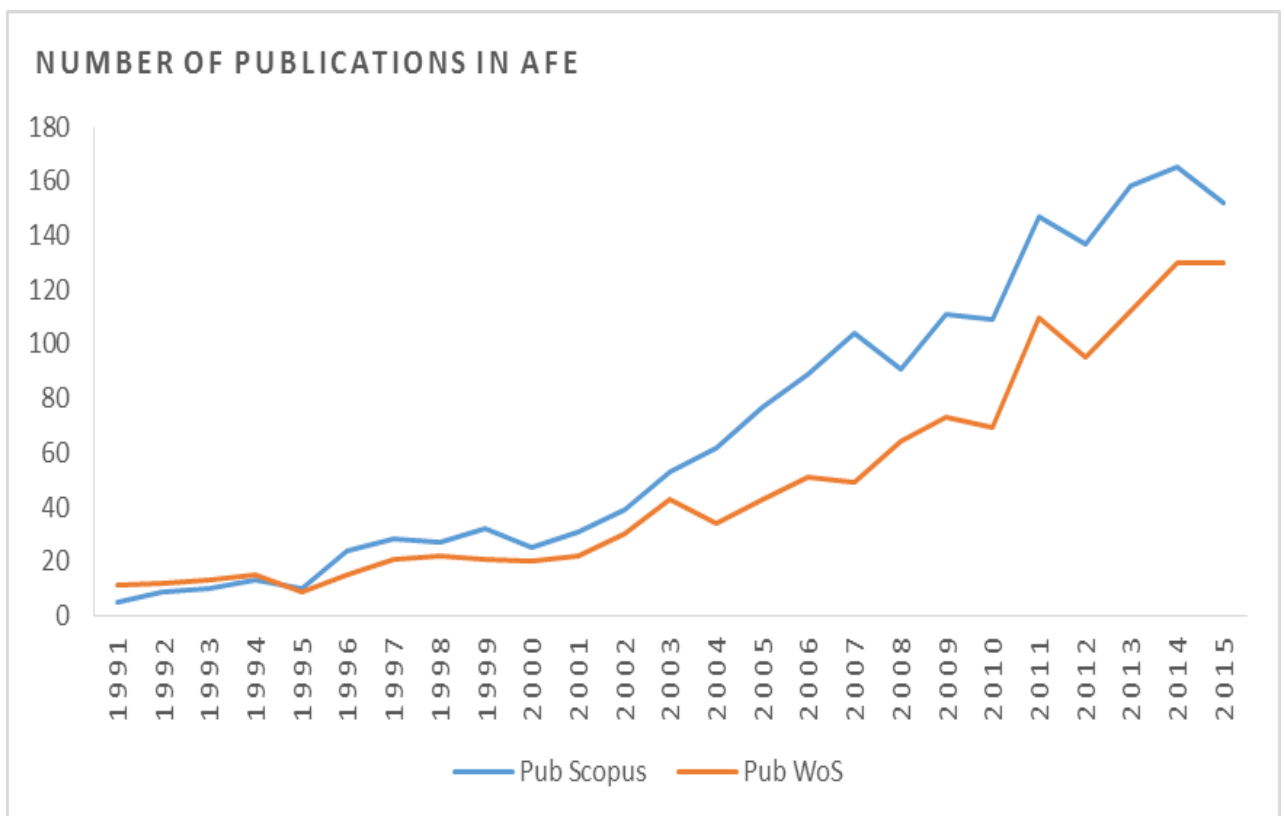
Secondly, we measure of research needs indicators detected from business based on the calculation of scores in 2 thematic:

- business climate
- and the % of firm's decisions to invest in the environment thematic

Thirty, we examine the graphic correlation between the relevance of the scientific production and business needs

Use two type of data

- ✓ **Bibliometric data** : Scientific publications in AFE in Cameroon from 1991 (to 2015) in WoS & Scopus (n:2,400)

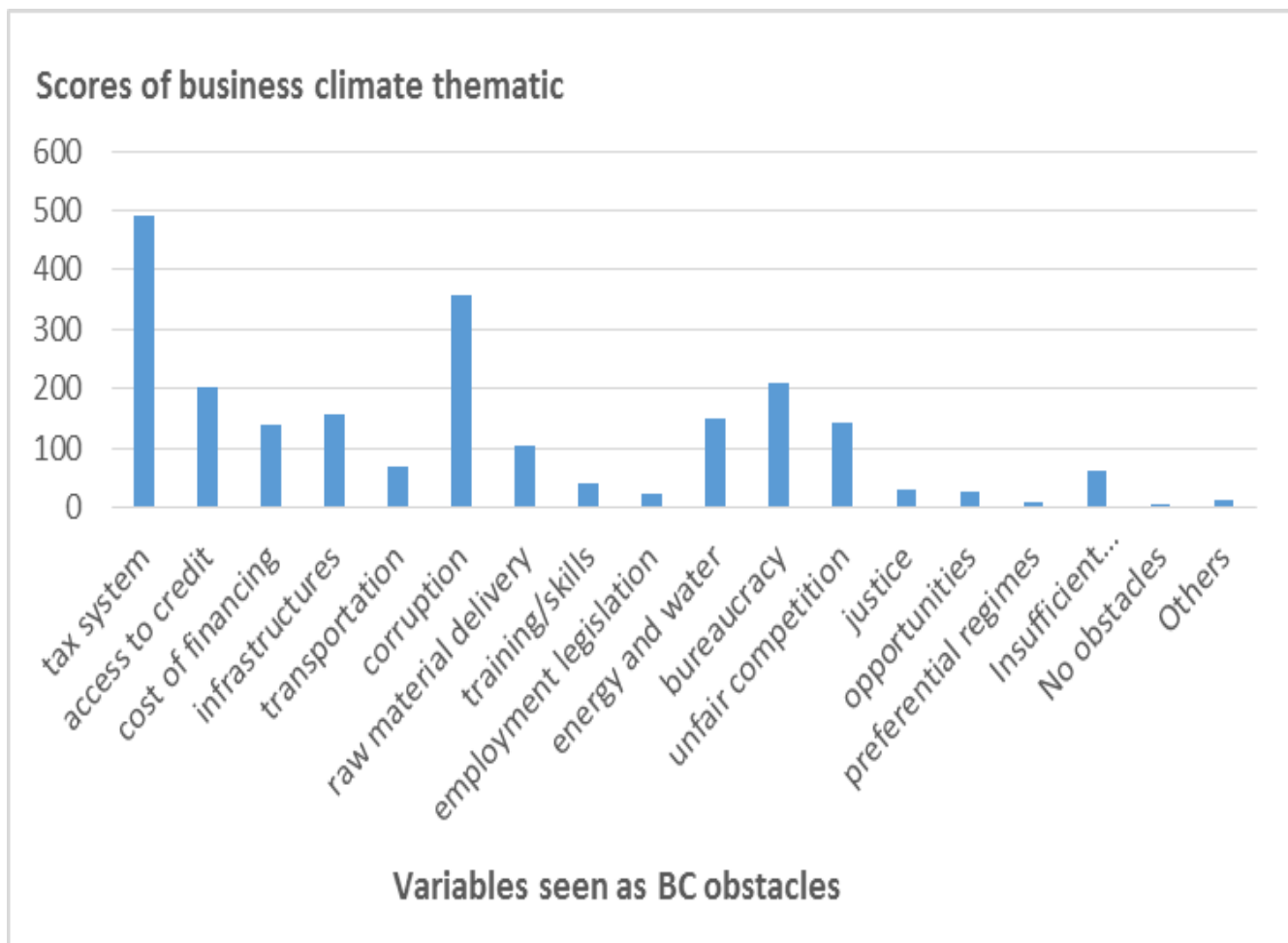


- ✓ **Survey of enterprises** conducted by the National Institute of Statistic (INS 2008) : a total of 317 agri-food companies (is the first)

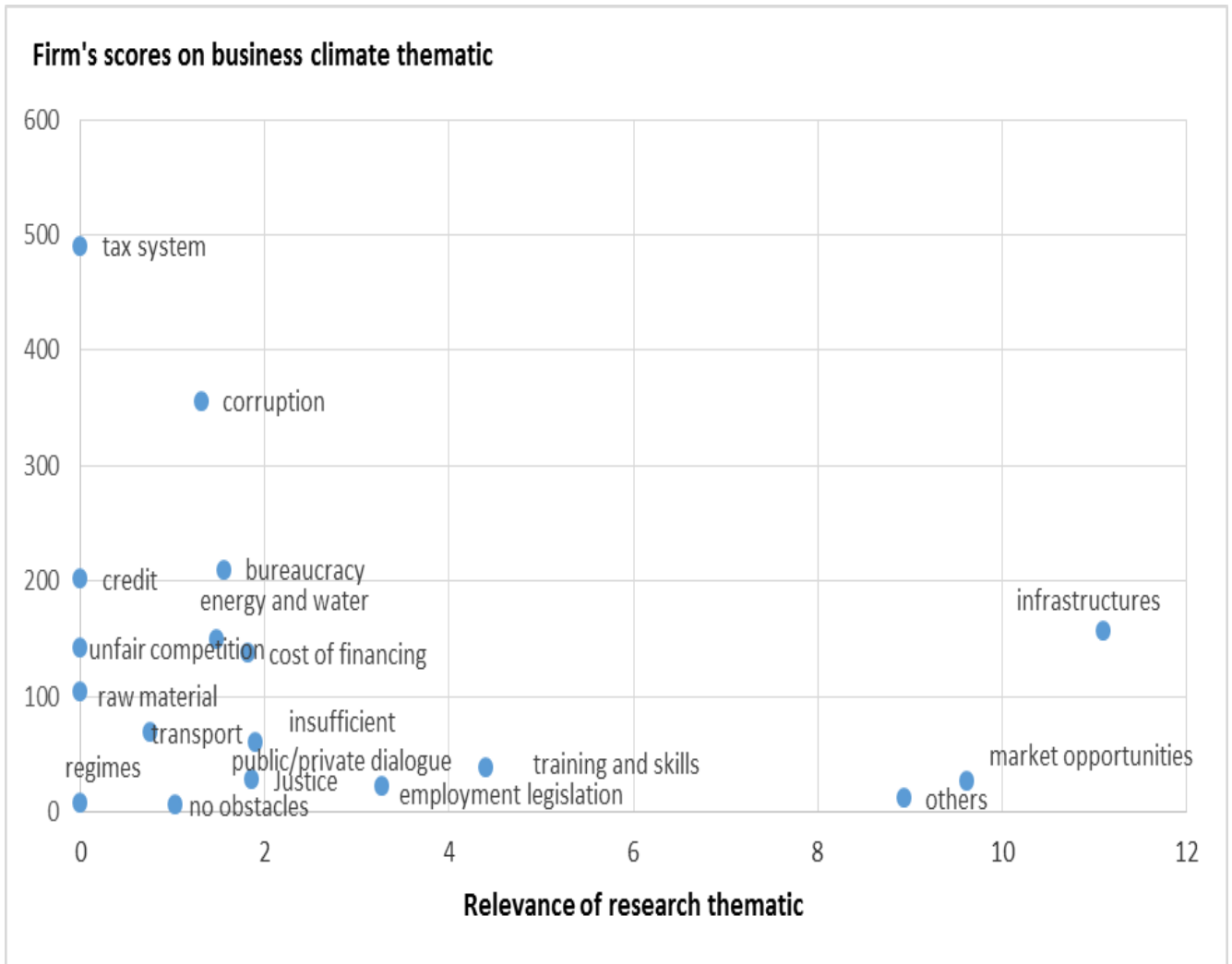
3. Results on the sub-thematic business climate

Regarding on this sub thematic, the main constraints for the enterprises (high scores) are

- tax system,
- corruption,
- bureaucracy
- access to credit



But...



The relevance of scientific publication over these topics is very low.

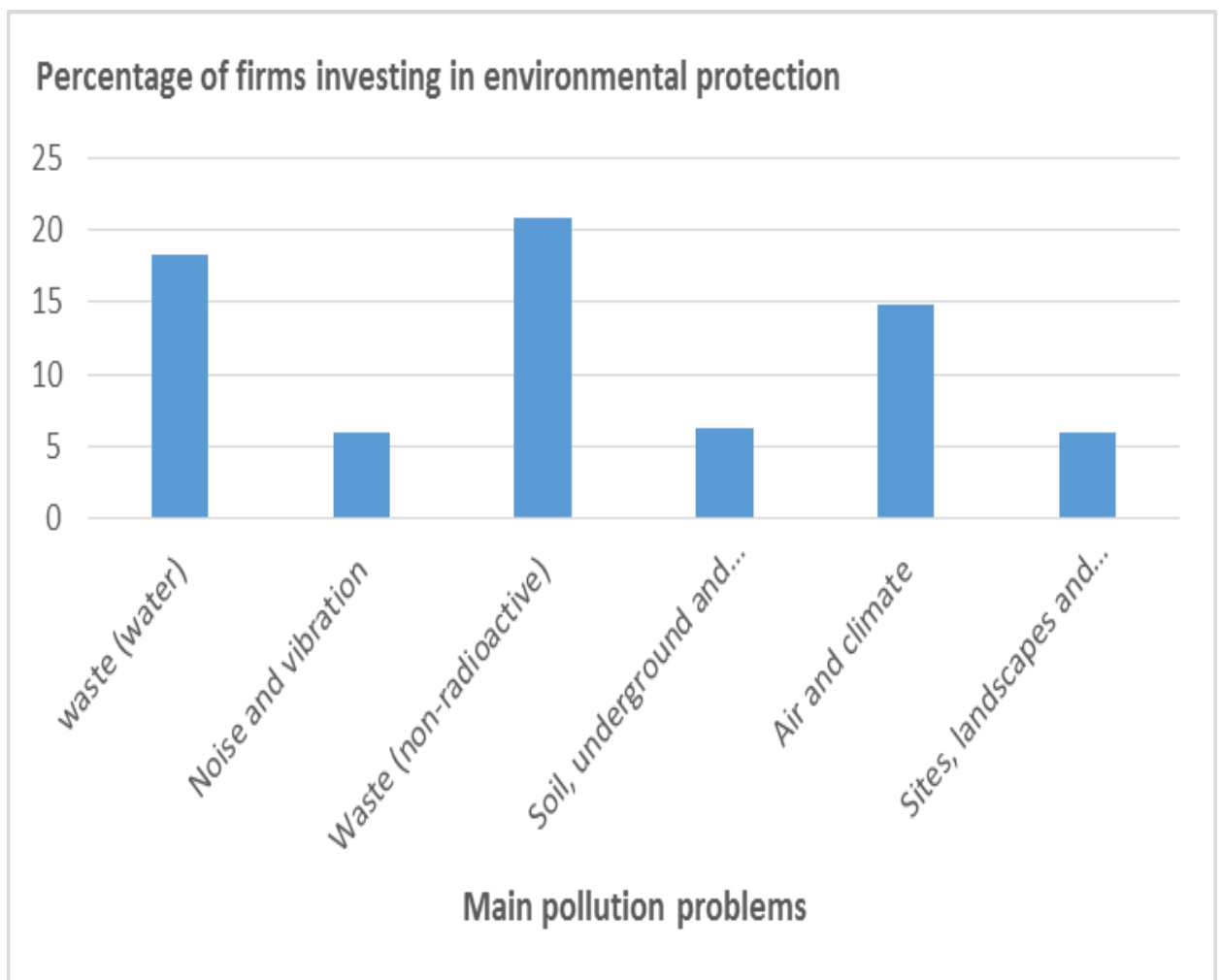
The high relevance of the scientific production are : infrastructures, market

Result on sub-thematic : environmental

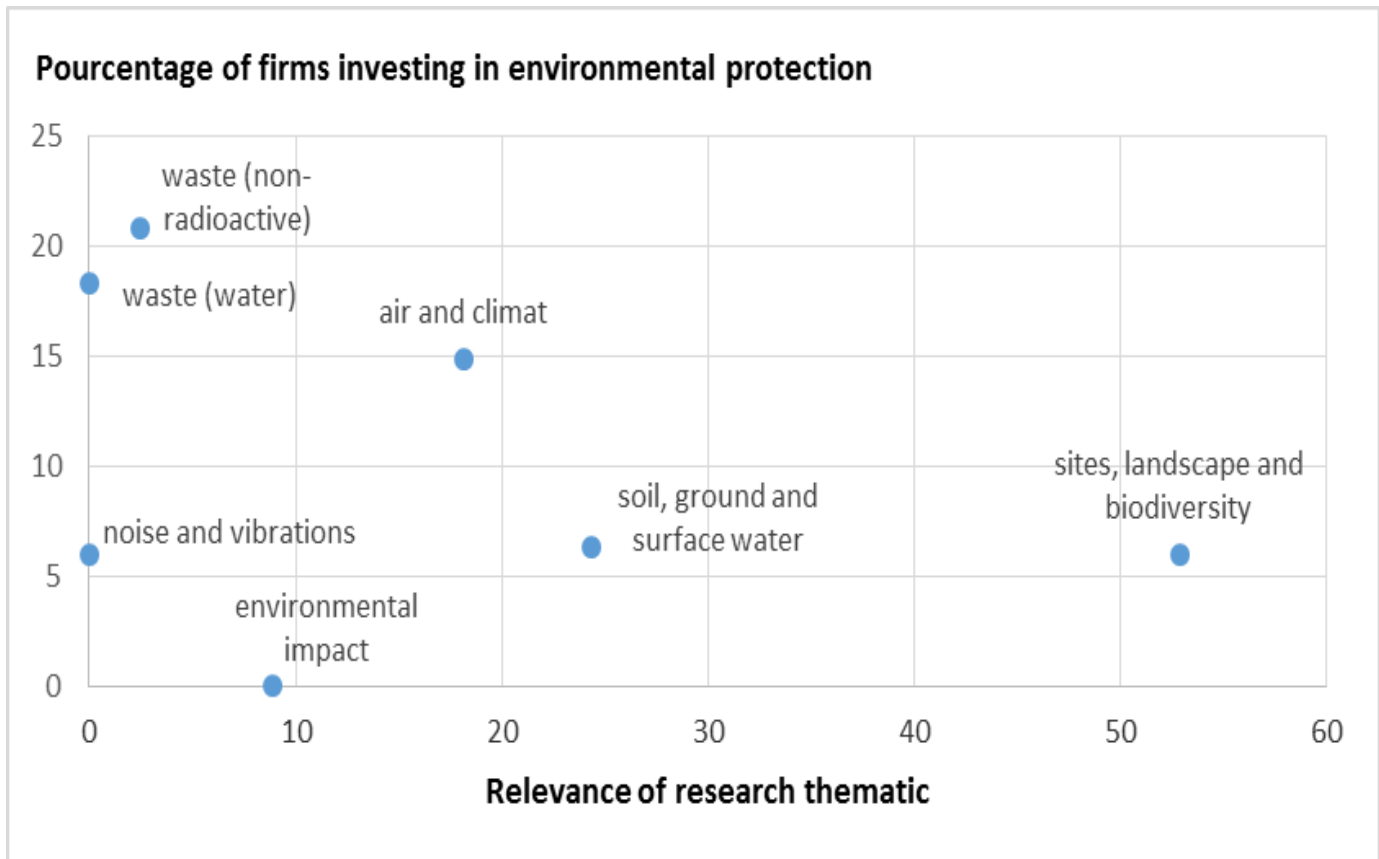
Enterprises are mainly investing on innovations related :

- to waste (non radioactive)
- and waste (water)

(20% firm investment on related topics)



But...



The level of relevance of thematics in scientific publication (with relation an occurrence of terms arising from scientific publication) are focus on :
landscapeundergraound and biodiversity ;

is a relative weak convergence between development priorities identified from perceptions over agricultural and food companies and research works expressed in the scientific literature.

4. Recommendations

Increase the national scientific production concerning the demand of agro-business in agri-food sector : waste, water management, corruption, taxes.

This recommendation is addressed to donors (International, public) involved in funding research programs.

To characterize the research needs of agro-business in the informal business sector.

The sample of 300 firms surveyed by the NIS employ only between 1% and 2% of the labour force. There is little research over needs of innovation in that informal sector.

This recommendation is addressed to INS and local university.

Conclusion

To analyze mechanisms to ensure that agri-business have access and use scientific publication in the innovation process.

The matching between supply and demand for research based on “key words” is only a predictor of the relationships between research and, innovation.

This variable is probably necessary but is not sufficient

A vibrant green cornfield with tall stalks and dense foliage. The image is a close-up shot of a corn plant, showing its long, pointed leaves and a central stalk. The background is filled with more corn plants, creating a lush, green field. The lighting is bright, highlighting the various shades of green.

**THANK YOU FOR
YOUR ATTENTION!!**