



TAFRA

ELECTION CONTEST

Policy through Data

In line with its goal to promote evidence-based public debate, Tafra is launching a competition aimed at producing statistical data analysis.

For the first time ever, the data collected by Tafra will be coded in such a way as to allow cross-referencing at the communal level: electoral data, general population census, multidimensional poverty and local development. All these data are disaggregated at the communal level. This scale allows an unprecedented level and variety of analysis for researchers and civil society.

The aim of this initiative is twofold: to promote the culture of factual debate based on concrete and tangible information and powered by data analysis. It is also about improving knowledge and understanding of the socio-economic dimensions of Morocco today.

Why is that important?

In accordance with its mission and objectives, Tafra has compiled and coded socio-economic data from different sources in order to deepen the understanding of political and socio-economic dynamics at the communal level and their correlations.

This initiative is new in that it aims to produce cumulative knowledge in the long term about a complex field composed of 1538 districts, represented by more than 30,000 elected officials. Data-based analyses will improve the intelligibility of this vast field that defies common sense.

We believe that the potential of the production of such knowledge extends beyond traditional research circles to the general public, that is interested in this initiative and have the skills to respond to it. In addition, it will be less a question of producing systematic analyses than of approaching the reality of these complex fields through simple models that are easy to be understood by the general public.

The question we're asking

In the last local elections in 2015, the average turnout was 67%. However, this figure masks large disparities: the minimum value recorded was 25% in Al-Fida (Casablanca) and 93% in Tanourdi (Midelt).

To be eligible to vote, you must be Moroccan, over 18 years of age, have full rights as a citizen and be registered on the electoral lists. Therefore, knowing that:

*Population of voting age > Population registered on the electoral list
> Population who voted*

The participation rate is calculated as follows:

$$\textit{Participation rate} = \frac{\textit{Population who voted}}{\textit{Population registered on the electoral list}}$$

The question we are asking is therefore the following:

What are the socio-demographic characteristics (explanatory variables) that explain the variance observed in the dependent variable 'txParticipation' ?

This involves explaining participation rates using one or more statistical analysis techniques. For example:

- Descriptive statistics
- Regression analysis
- Classification
- Clustering
- Matching
- Any other proposal that significantly improves the understanding of the phenomenon.

In other words, what explains, among the socio-economic data at our disposal, the political participation of Moroccans? To deepen the understanding of the context and the question raised, the booklet *La responsabilité des élus dans le cadre de la régionalisation avancée* (in french) may be useful:

<http://tafra.ma/wp-content/uploads/2018/07/LivretRegionalisation2017.pdf>

The answers we are looking for

The answers must satisfy the following conditions and logic.

The substance:

- Present the constructed analysis and its justification (why this variable is used to explain that fact?),
- Present, interpret and comment on the results of the model in French, Arabic or English,
- Conclude with the limitations of the model used and how to improve it,
- The answer is not predictive, but explanatory. We expect participants to explain in words the results of their statistical analysis, whether it is through regression analysis, clustering or other. Thus, we do not necessarily seek to explain the maximum variance in the dependent variable, but to produce a narrative report that highlights important factors explaining the participation rate, especially to quantify the relationship between each potentially important explanatory variable and the dependent variable.

The presentation:

- The rendering must consist of a code with a narrative report of a maximum of 4 pages in .docx (Word) or .pdf format, in Arial font size 11, and with single line spacing. The rendering can be shorter. The aim is to receive a code to replicate the results obtained, and a verbal explanation of the results obtained. The narrative explanation can be delivered in Arabic, French or English.

- Warning: the analysis must only use the `.xlsx` file that was provided for the contest. It is not allowed to use other data sets.
- The answer must include at least one visual figure of your choice: a graph, a diagram, a curve, etc.
- You must send the code that produces all the figures and tables in `.R` format if using R, in `.do` if using Stata, or in `.txt` file for SPSS, SAS or Python. Any other language or software will not be considered.

How to participate?

- Complete the online form available at <http://tafra.ma/concours-electhon/>
- You will receive a data file in `.xlsx` format.
- You must send your results before November 1st at 9:00 GMT to the address: `electhon@tafra.ma`. The attachment must contain two files:
 - A `.docx` (Word) or `.pdf` file presenting:
 - The method used,
 - The main results obtained and,
 - A visualization of the results obtained at the choice of the submitter
 - The script that produced these results.

How will the winner be determined?

The winner will be chosen by an interdisciplinary jury of teacher-researchers. This jury is composed of:



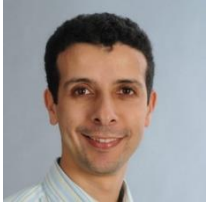
Hicham Ait Mansour, PhD in sociology, professor and researcher at Mohammed V University (Rabat),



Romain Ferrali, PhD in political science, researcher at New York University in Abu Dhabi (UAE),



Youssef Oulhote, PhD in Epidemiology/Biostatistics, professor and researcher at the University of Massachusetts and the School of Public Health at Harvard University (USA),



Youssef Idaghdour, Phd in Genetics, Professor and Researcher at New York University in Abu Dhabi (UAE),

Eligibility to the competition

This competition is open to all. The evaluation of the analyses provided will be based solely on the quality of the contribution.

In case of questions

If you have any questions, you can write to us on [Tafra's Facebook page](#) using the hashtag [#TafraElecthon](#). Your question and its answer will be posted on the same page. The deadline for questions is 48 hours before the closing date. The delay for answering questions is 24 hours.

Prizes for the winners

The winner will be awarded with a laptop computer, donated by Averroes School tutoring and will be invited to present his work at a public event on December 6, 2018. He will also benefit, if interested, from an internship at Tafra.

The jury reserves the right to proclaim a second and a third, who will also be invited to present their results at the same event.

Calendar

- Start of the competition: October 1st, 2018
- End of the competition: November 1st, 2018 at 9am Moroccan time
- Competition results: November 12th, 2018
- Event to present the results: Thursday, December 6th, 2018 in Rabat. (location to be determined)

Intellectual property and copyright

By entering this contest, participants agree that the intellectual property of their work is governed by the [Creative Commons CC-BY-NC-ND 4.0 license](#). All works deemed eligible will be published on the website www.tafra.ma, and their code freely accessible.