

**PROBABLE SOCIAL, CULTURAL  
AND ADMINISTRATIVE IMPACTS IN THE  
ADJUSTMENT OF THE PRESENT  
CARTOGRAPHY USING GLOBAL POSITION SYSTEM.**

Personal Research Work

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*Taking into account the technological and scientific advances applied to the Informatic and, especially, to the Earth Sciences it is necessary to study, analyze and conjecture the possible impacts that occur and will occur in the near future. This research work deals with the social, cultural and administrative difficulties in adjusting the present cartography using the Global Position System.*

The cartography being used up to now by different countries and Government Departments is not reliable since it is generally based on more than one coordinate system and it is badly georeferenced, giving as a result maps or charts highly imprecise, both geographically and thematically.

The adjustment of the cartography using Global Position System causes an impact which would be reflected, for instance, in the different location of the administrative boundaries, both lineally and superficially. This led us to restate, for example, the question of tax collection which, according to the old cartography, had a financial value but, using the Global Position System, it would be modified in a higher or lower tax collection.

If we read the Rules and Regulations of Municipal, District, etc. Boundaries we find that, in some countries, they have been created more than 40 years ago, therefore the determination of points or intersections are somewhat erroneous in relation to the same surveying made with

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From the theoretical point of view, the following question arises: what would happen if, in the present cartography, the total surface of the "Alfa" Municipality has been of 50 km<sup>2</sup>. and, adjusting it, it is now of 45 km<sup>2</sup>.? (See *graphic N° 1*). A smaller difference would cause a financial, economical, cultural and social damage to this Municipality but, on the other hand, it would benefit to the contiguous Municipality "Beta" which would extend its surface and increase its tax collection. (See *graphic N° 2*), in this case, what would happen if Beta demands Alfa Municipality the payment of the taxes it has been wrongly collecting? It would cause an administrative-political problem between different Municipalities. Besides, the Historical Places, Recreation Centers, etc. would be also affected as well as its population who, possibly, does not want to change of Municipality or to modify its adress and identity cards..

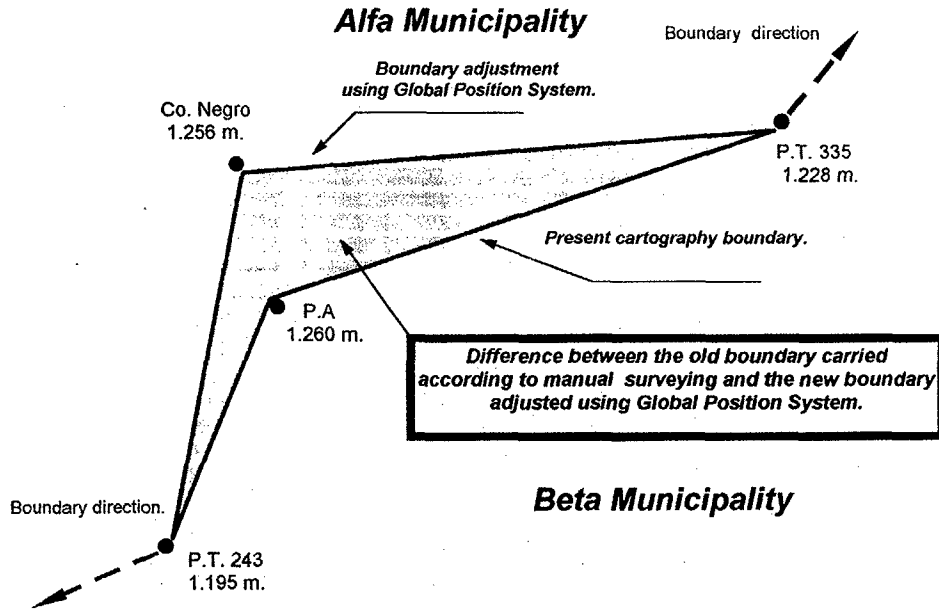
As regards Planning the surfaces would be modified both, in their respective areas and in their real terrain location; consequently everything done up to now should have to be planned again or modified. If the Alfa or Beta Municipalities add the geographic adjustment to the Cadastral Information System being used up to now, all the levels of information should have to be modified or done again. This means extra expenses as, for example, work man hours, writing and drawing materials, etc. They should also have to call again specialists as agronomists, geographers, etc

Some developed countries possibly do not understand this problems but they do exit in underveloped ones. The more recent proof is the conflict between two Southamerican countries which do not have a good legal and geografic demarcation. It is an example of International Boundaries, but this research work is aimed at the internal problems of any country.

The present research work is only a personal approach of a cartographer whose purpose is to show the probable occurrence of differents impacts in which many people are involved and should have to solve .

This research work is still in its ellaboration stage so those people interested in it and want to collaborate, please contact me.

Graphic N° 1



**Graphic N° 2**

