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Opinion

Precision Agriculture and its Applications in Environmental Sustainability

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In recent decades, concepts such as precision agriculture, agriculture by specific site, intelligent Agriculture, agriculture by spatial variability, among others, have been mentioned around the world. In my opinion it could be called Agriculture by micro-ecosystem.

Recent trends have arisen from different problems that have arisen about how to manage the spatial variability of lots cultivated lands, the economic losses in certain areas of the lots, increases in production costs, Environmental Pollution that is GE in agricultural processes, the need to Porte GER Natural Resources, La Agricultural Sustainability among others.

A very general and basic concept of precision agriculture is guiding the set of knowledge, techniques, Multi-thematic information according to the spatial and temporal variability of an agricultural exploitation and its Interactions with the natural environment in order to find economic benefits and environmental sustainability.

To solve the questions posed and with the vertiginous technological advances in space or satellite sciences, informatics, mathematical logic, high precision equipment has been developed applicable to the agricultural field, creation of specialized computer programs, creation of geo-referenced databases and with the interfaz of these elements, it has been achieved or fix with high precision many of the problems suggested. However, these developments have been and continue to be very successful especially in the developed countries or for farmers with adequate economic resources in developing countries and also those who they have access to the current technological information.

However, these developments are limited to small farmers in the world who do not have the financial means to make large investments in high-tech equipment and in many cases by Little or no technical assistance or transfer of technology. However, it is also possible to implement these approaches in a more Simple with small producers, but serious comprehensive rural extension programs are required and permanent to achieve the goals.

In fact, small and traditional farmers have historically developed these concepts by Intent and error, perhaps in realize, this has happened when producers after multiple Economic attempts and losses in a given area or lot, after a long time they decide to leave la, to reduce it, to change of Cultivar or of type of exploitation, that case can be called Precision agriculture, of course it needs to be tuned with the technical support of the professionals in the respective area.

Therefore, it is very important to have the soil maps with their respective reports, because with them in advance they know the potential of the soils in each cartographic unit before developing an agricultural project and of being to implement the most suitable agricultural practices for each type of soil and cultivation.

Applying the concepts and principles of precision agriculture it is possible to develop the most appropriate agricultural practices according to the potential of the soils, type of cultivation and resources available always looking for environmental sustainability. These

guidelines are possible by using very advanced technological advances for the farmers who can access them and in parallel apply for the smaller ones even using few resources, Regional knowledge and local technology [1-3].

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