María Jiménez:"in Spain is not subsidize the use of technology for efficient irrigation""

By Milagros Jurado

The commemoration of the World Water Day brings us to this interview with María Dolores Jiménez Ruz, technical and commercial director of HIDROSOPH España, a company specialized in the sustainable management of irrigation ... with she we have addressed issues as important to agriculture as the optimization of the use of water in irrigation systems and, in short, the need to continue to advance, with a more effective commitment by the different administrations, in the development of R & D & I projects that entail greater savings and profitability for the farmer.

E-Comercio Agrario (ECA): today marks the World Water Day, what are the main challenges facing current agriculture in terms of sustainable use of water resources?

M.D.J.: the main challenge is to achieve an efficient, optimized use of water ... many farmers believe that efficient use refers to water saving, but that is not what I am talking about, but an optimization of water resources that, sometimes it leads to saving water, other times we are not talking about saving but a different distribution of the water that we contribute to the crops to get maximum use ... In the end, it is a question of water optimization, linked to results and quality, or what is equal, *to develop the irrigation process valid to increase the profitability of crops,*

maximizing production and quality. A quality that goes beyond product collection, since irrigation management also affects the post-harvest life of a product.

It is important to point out that when we refer to an efficient irrigation management we are also talking about measuring. When we measure we can improve and repeat, since an optimized irrigation is one that can be extrapolated to other plots and campaigns, obtaining a greater control of the harvests. When we measure, we learn from the results obtained, which allows us to have a greater and better control over our production and, therefore, to reduce the risks.

ECA: what factors or needs contribute to boosting research and innovation in more rational and sustainable irrigation and water use systems in agriculture today? Is the fight against climate change one of them?

M.D.J.: since 2000, I have been working on what is known as Precision Agriculture or Intelligent Agriculture, and since then nothing has changed almost anything ... now there is more talk and there is a greater awareness of the need for better wsater resources but in the field of research and knowledge has not evolved so much. Although we have been working on models of efficient management in different crops, much remains to be done. *Therefore, the great change lies solely in the fact that this issue is much more present, there is more and more talk about optimized irrigation management.*

As for climate change as a catalyst for greater awareness of the need to advance in more sustainable irrigation systems, I would like to think that this is so, since outside of my profession I maintain that position and believe in the business models that advocate for sustainability and environmental respect. But, as I perceive it, *in fact agriculture is not moving for these reasons, but because some supermarkets are already beginning to demand that in the production of food has been applied efficient irrigation*, which is believed an optimized use of water has been given possibly because, by pulling a little more of the thread, society in certain markets to which most of our European exports are directed, are demanding it.

ECA: more rational management of water translates into greater water savings and, therefore, lower energy costs for farmers ... what are the main advances that have been made in this regard?

M.D.J.: an optimized irrigation can save water, *but when we talk about savings and costs we must also extend it to other concepts such as fertilizers or electric energy, and we should also consider indirect savings in other processes such as phytosanitary management, etc*. The tools that we can count on today for the management of water use in agriculture are practically the same as 15 years ago.

> "Practically the advances have come from the cheapening of the prices of the equipment that makes that they can be more assumeable on the part of the farmer"

ECA: what still remains to be done in terms of a better use of water resources in agriculture? Which do you understand should be the main objectives and the tools to achieve them?

M.D.J.: way, everything, since we are starting right now, even in areas with a lot of technology like Huelva and Almería where it is produced intensively. In research, adapted models of water management are being developed but in many cases they are still to be solved. Let's talk about the crop and the area we talk about, we are still at an early stage.

ECA: the commitment to the modernization of irrigation is the foundation of the National Plan of Irrigation ... at what level is Spain compared to other countries on and off the European continent?

M.D.J.: As regards the efficient use of water, Spain is not ahead of some countries, not only in Europe, but also in some areas of North Africa, where there is a lot of work with this type of tools. Going to the case of neighboring Portugal, a country in which our company originated and has been working very hard, there is an abysmal difference with Spain, *since Portugal is subsidizing technology oriented towards an efficient use of water. On the other hand, in Spain, we have worked on a National Irrigation Plan which, because it is not economically endowed, remains in mere literature*. For all this, *we can not say that in our country there is a decided commitment to the modernization of irrigation. We have to go to research or innovation projects promoted by consortiums, etc.,*

> "There is really no direct involvement of the Autonomous Communities or the State with promoting advances in irrigation management, simply because no funds are allocated for it"

ECA: from your company, Hidrosoph, do you carry out any project of technology transfer or transnational cooperation to continue advancing in solutions increasingly efficient for the farmer?

M.D.J.: the transfer should not be carried out only in the field of technology, should also occur in

the field of knowledge and methodology, if not, we will not go anywhere. *Very interesting projects are being carried out to popularize the use of new technologies in different areas.* In addition we work with other countries, specifically in different projects in France with the collaboration of Spanish and French companies, and with other companies that, within the same sector, their business object is different. Thus, we have agreements with companies that work the part of remote sensing with drones for fertilization, etc.

Although we are always doing things in the field of research, participating in various projects and initiatives, our purpose is day-to-day. *Our methodology is not a methodology for research, which we can do, but is basically oriented to the management of a daily work: we have more than 1,800 points that we manage every day*, so more than research, We speak of reality, because that is what we deal with daily. Today, *we manage more than 190 different crops among all our customers and we are very focused on being able to expand our work area. For example, we are going to start working in the olive sector in Mexico.*