

The World Forum for a Responsible Economy Arras 2016

Third agricultural revolution The Smart Agriculture

The World Forum of Arras was about the future agricultural prospects.

The conference began with Mr Bertrand Vandoorne, a Teacher/Researcher belonging to the Agriculture Engineer School of Lille (ISA), who gave us a few general ideas about smart agriculture. The public then discovered a dynamic approach of agriculture.

Mr Pillaut was the first speaker. He is a breeder, the general secretary of the Agricultural Chamber of Vendée in France and the author of the book entitled : “Agronuméricus, l'internet est dans le prés”.

According to him the most important date in the digital world was in 1975 when Steve Jobs created the “personal computer “ because without this invention, the agricultural world would never have been the one we are now living in.

We are now on the verge of an “anthropological” revolution, which means that we are now making a U turn into a different physical and human kind of science.

We are now using the digital world the digital world to refocus on agriculture and digital world changes the frame of the territories because the net has dematerialized the transparency of each of us. Mr Pillaud’s book has 6 main points which are the following : risk management, fundings, development research, smart agriculture, trainings and advice, logistics management.

All points will draw the picture of the future agriculture, 4 kinds of agriculture then appear :

Great plain farms, family farms, urban farming and farms in emerging countries. This challenge is to view the agriculture of tomorrow

Mr Sevrac, was the second speaker. He is the co-founder of Naïo Technologies, an agricultural robotic company created in 2011. It creates robots for mechanical weeding destined to vegetable produces and also recently to wine growers. Those machines - called “oz”, a small robot for mechanical weeding, “Dino”, a bigger model and finally “Ted” for wine growers - are not dependant on the GPS RTK technique, but they work thanks to lesers and cameras. He then showed un videos about the work of robots and argued about smart farm.

The last speaker was Mr Tschakarow, a robotic expert at Deepfield Robotics, a subsidiary firm of Bosch in Germany. The first thing was to understand the reasons why Bosch started being interested in agriculture. Indeed, it was attracted by the high added value of crops because it possessed the sensors able to answer the farmers’ needs : the robots are equipped with soil temperature sensors and linked with smartphones for weather conditions. Big data and smart data are 2 keys words for the future.

Each speech was followed by a round table meeting during which the co-founder of Naïo Technologies. Mr Sevrac explained the prospects of his firm with the aim of doubling the sales. He has already sold 50 robots of 21 000 Euros each.

During the meetings a video of John Deer, one on the most important world leader in agricultural machinery was viewed. It showed us an imaginary world of agricultural machines, everything was automatic in an intensive system.

Mr Pillaud wanted to react to this video because it was not his vision of the future, he rather saw great steps in data and network sharing.

This still deserves more debate yet it remains true that we are on the eve of a revolutionary change in the agricultural world.

For our three speakers, technology would answer to a need which would be the reduction of arduousness within the work. To conclude everybody could access to this, once the need is extremely strong.