Louise Fresco – Dies Natalis, 9 march 2018

“The past is a foreign country... as the poet L.P. Hartley said. We can hardly imagine what life was like 100 years ago, after the ravages of the first world war, the deadly Spanish flu and looming economic crises. Most of the work on the land was still done by hand or animals. More than half the world population was undernourished. The creation, at that very time, of an institution dedicated to agriculture was a sign of hope: that education and science could better the lives of mankind.

And that hope has not been disappointed. This is not the moment to list our achievements but there can be no doubt that “Wageningen” has contributed in very significant ways to the tremendous progress in the world and in this country. In the last 50 years alone food demand has tripled while population has doubled and, amazingly indeed, these needs have been met.
Our contributions are perhaps best summarized as the application of fundamental ecological knowledge on plants, animals, environment and humans. Gradually, this knowledge has led to fewer emissions and waste, efficient use of water and chemicals and higher yields, meaning that more land could remain nature. The combination of fundamental understanding coupled with applied research promoted interdisciplinarity as a matter of course. From the genetics and modeling of key crops and animals, biological control, food safety and chemistry, nutrition and health, to sustainable fisheries, horticulture, agricultural extension and economic statistics – Wageningen has found new ways and set standards every time.

In the course of the century, two points proved crucial. The collaboration with the former DLO-institutes, which is evolving into an ever closer synergy. And of course, the world famous golden triangle, the partnership between farmers, foodagri business, government and international partners – and, now more so than earlier, the continuous dialogue with society. The golden triangle is extending to a four-sided diamond.
Our stars have been our students. We are extremely proud of our nearly 49,000 living alumni, with about 10,000 from outside The Netherlands. They can be encountered them all over the world!

The past century has shown the power of a rigid, science-based approach with close long term partnerships. This combination has been instrumental in dealing with the unforeseen

ecological and human cost resulting from technological progress. The core of scientific thinking is to learn from past mistakes and unintended side-effects through continuous peer review.
However, this responsive, responsible and self-cleansing capacity of science is not perceived like that by everyone. Hence, again, dialogue is so essential. Nevertheless, the environment in which we operate today is changing rapidly. Confusion, fears and fads abound in an age of internet where every personal opinion may go down as a fact and science is sometimes used as a supermarket where facts can picked according to need. Not just the past, even the present is sometimes a foreign country.

What will the next century ask and bring? It is even more of a foreign country. The enormous leap forward from manual and animal power and a few crude chemicals to the highly sophisticated foodagri systems of today would have been utterly unimaginable 100 years ago. Nor would anybody have guessed that moving from a world of scarcity to one of plenty would lead to unprecedented health and environment problems requiring us, for the first time, to limit caloric intake.

Yet, at first sight the challenge seems not so different from 1918: hunger, poverty and inequality still touch billions, and we must provide food and other biological components for a growing world population. While technically this is possible, our success in this is not a foregone conclusion.
But so much more is at stake now! Everything, in fact. The planet itself. Our true and only commitment must be to make a difference in “transforming lives while saving the planet” as the preamble to the SDGs put it so well.

Predictions for the next century are loaded with unknown unknowns. But this is what we can be sure of. In a world moving to a post-fossil age, agriculture is the only sector able to produce food, feed, fibers, pharmaceuticals, fuels and industrial ingredients through the management of biological processes of plants and animals. The survival of the humanity depends on how we deal with land and marine biomass. Wageningen started as an agricultural university, to which, in the course of the century, nutrition, the environment and consumers were added. Now we must expand again. The next century requires a thorough understanding of the planetary ecosystem and the redesign of biological systems used by humans. Such tremendous complexity requires new mental flexibility, with great

consequences for what and how we teach.

Uncertainties abound. How much and how quickly will animal proteins be substituted by plant proteins? How big are land savings due to a circular economy and will they really benefit natural ecosystems? How successful we will be in using marine resources and new, more photosynthetic efficient varieties and species? Will cropping shift to higher latitudes in a warmer age? How fast can Africa implement continent-wide irrigation? Will we seriously explore extraplanetary food supply, perhaps not using plants but bacteria? And what about direct synthesis of nutrients? Will chains shorten to connect producers and consumers in the search for authenticity? How much resistance will there be to personalized nutrition? Will life expectancy continue to increase or be affected by obesity? Will every kitchen have a 3D printer? These are just the simple questions.

Who will be the farmers of the future? How will they be rewarded? Will market policies promote the contribution to overall goals such as biodiversity, employment, animal welfare? How fast will the energy transition take place? Will cheap energy lead to cheap inputs into agriculture? What impact could geopolitical tensions, massive food safety concerns, pandemics or trade barriers have? Will the trust in science decrease or increase?

The greatest disruptors now seem big data, digital connectivity, sensors and artificial intelligence coupled with rapid advances in genetics, biochemistry, materials and nanoscience. Knowledge is externalising, moving from our heads, books, computers to global data bases fed in a continuous manner. What will this do to education? To scientific and personal responsibility? Just like our predecessors were ignorant of the ecological effects of the use of chemicals, we have no idea what the blurring of boundaries between man, nature and machine will bring in the long term. To many, these extrapolations are stressful. We need to take care that science remains trusted as a way to explore the future while providing answers for the questions of today. This is why we seek interactions with artists and designers to make room for questions and to navigate the dramatic changes of the 21st century. The future will be very foreign indeed...

Meanwhile, our intention is to remain locally rooted and globally connected. Rooted on this beautiful campus surrounded by our partners, in the pragmatic cultural diversity and openness of The Netherlands, and closely integrated into Europe. A Europe which I feel

must continue to stand for the ideals of Enlightenment while fostering critical dialogue, especially now when irrational and anti-progress materialism go hand in hand. And by the way, this also implies safeguarding education and science as permanent public endeavors.

The enormous challenges are reflected in our amazing centennial program. We are most grateful for the generous contributions from our many partners and sponsors – you will find all names listed in the program. Many of you have been with us for a long time. We take your continuing support as a token of your trust in our next century and your willingness to explore that foreign country with us.

We will start with our thematic week on Life, featuring the latest science as well as moral debate and Frankenstein, followed by weeks on Earth and Food. There will be artists in residence, theatre, street festivals, sports, concerts and the worldwide wageningen alumni day connecting celebrations in 45 countries. Summer and fall highlights include the SDG conference with many prominent speakers, the Borlaug youth institute and our company day.

Finally... Here we stand at the beginning of a new century of Wageningen University and Research. May wonder and wisdom guide us into this foreign country. Wonder at the breathtaking views and amazing innovations of science. Wisdom to use our creativity for the greater good of mankind. And both wisdom and wonder to educate our students to become responsible stewards of the planet.