

#31

DRUCK DIR DIE WELT

Jetzt auch in 3D

CEOS UNTER 30

Was junge Gründer bewegt

MAN LERNT NIE AUS

Bildung wird Startup-Sache

BERLIN VALLEY

DIGITAL REVOLUTION

9€

BÄUME STATT MILLIONEN

Warum Ecosia-Gründer Christian Kroll
sein Unternehmen spendet



"Act like an activist – think like a scientist"

Thimo V. Schmitt-Lord MBE, Head of Bayer Foundations

THE BEAUTY OF IMPACT – TRUTH IN TEN

A Series of 10 publications by Bayer Foundations about impact startups who create new solutions for humanity's grand challenges for better health and against global hunger.

Edition 5 of 10: Pushing Humanity Forward - A Tribute to Food Pioneers (by Thimo V. Schmitt-Lord MBE)

Food and agriculture are the oldest industries of mankind – and the most inefficient ones today.

Our broken food systems lead to food waste, malnourishment and environmental damage which cause an estimated €1.8 trillion a year in societal damage, lost productivity and medical bills. Around 30% of all produced food is wasted, only 10% of the world's land is arable, 80% of this limited land is used just for the purpose of producing crops for cattle feeding - while breeding cattle requires too many resources, it is a main driver for global warming and by far the least sustainable way of feeding a growing world population.

Our food system is out of balance. Some two billion people go to bed hungry while another two billion are facing malnutrition and obesity.

In a nutshell, there is insane waste of limited resources. Our planet will not survive if we simply adopt a 'business as usual' attitude. It is time for new approaches, for disruptive innovations that complement our systems and deliver new answers.

The projects featured in this article are working on big ideas with potential to change food and agriculture as we know it. These are true pioneers – courageous men and women whose hunger for innovation has enabled them to excel in spheres never imagined. They have dared to brave the unknown for the purpose of shaping the future of mankind by creating new solutions for one of humanity's biggest challenges: the food crisis. Their innovations have the collective power to solve unmet needs of the rising billions. They are icons of progress. Let's embrace their innovations to create social fiction and desirable futures together.

Fotos: Bayer Foundations, SN Technologies Ltd.



Bayer foundation CEO Thimo V. Schmitt-Lord talking about the impact of beautiful business at 48forward in Munich



Dan Watson, founder of SaftyNet Technologies

ROLE MODEL 1: SAFETYNET - SMART LIGHTENING NETS FOR SELECTIVE FISHERY (UK)

Unwanted bycatch is a massive driver for over-fishing. 27mio tons of fish per year is unwanted bycatch and thrown back dead into the ocean – this is insane. The UK-based social startup SaftyNet creates Smart Lightening devices for Selective Fishery - the technology uses specific light spectrums to attract and de-attract fish species selectively into the nets. This avoids by catch and helps significantly to stop overfishing the oceans. In partnership with Bayer Foundations, SaftyNet will cooperate with fishing corporatives and NPOs in Indonesia, putting 120 lightening devices to work and analyzing its success as a basis for later scale-out into bigger fishing co-operatives across Oceania.



ROLE MODEL 2: CLEARKARMA - BLOCKCHAIN BACKED SOLUTION FOR FOOD SAFETY AND SUPPLY (FRANCE)

Processed food today contains many ingredients from a lot of individual supplies, often shipped across the globe. This makes tracing of contaminations complicated, and also lowers transparency on food ingredients. As one consequence, over 500 million cases of food-borne illnesses with over 350,000 death cases are reported every year. Furthermore, food contamination costs the society 75.5 billion dollars every year. ClearKarma has developed a block chain-backed solution that is capable to trace, validate and document any food any time everywhere thanks to the powerful capabilities of artificial intelligence and blockchain. ClearKarma's systemic end-to-end smart food sourcing technology has the power to reform the food industry while preventing millions to suffer from food-borne illnesses.

ROLE MODEL 3: ACRAI - FUTURE FARMING AI ROBOTS REPLACING HERBICIDES (GERMANY)

Herbicides have disrupted farming for the past decades – but with public acceptance for herbicides widely decreasing, their future becomes uncertain. Today, healthy diets and tech solutions are important aspects in our daily lives. So why not combine both? Acrai has the vision to make agriculture more sustainable and efficient by building autonomous robots, which use deep learning based computer vision to classify and localize crops and weeds. These robots are able to differentiate crops from unwanted plants. On the fields they are constantly spotting, plugging and removing unwanted plants from wanted crops, replacing herbicides.