

Agriculture at the crossroads

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As globalisation has greatly widened the lens through which we view human activities, the critical role of agriculture in this larger tableau – and of the farmer in particular – has expanded as well. All of the seemingly intractable global challenges we face – exploding population growth, hunger, poor nutrition, lack of food security and safety, a growing middle class, and changing diets – are falling heavily on the world's farmers.

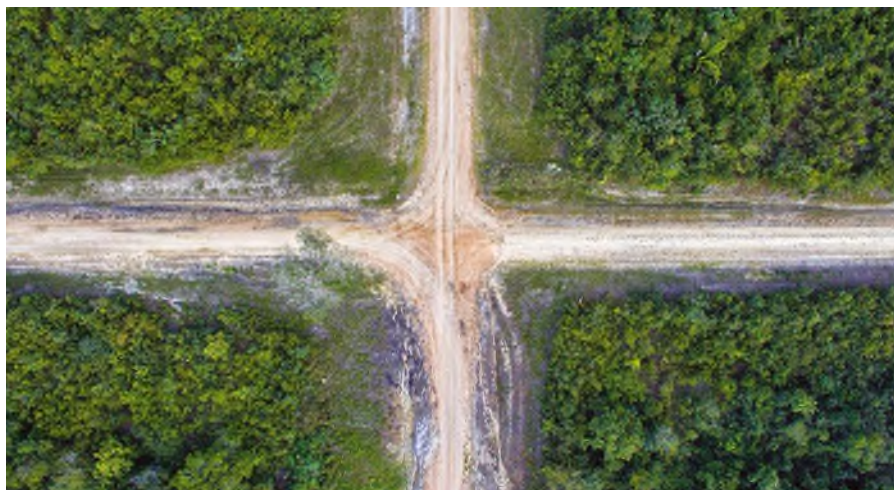
By 2050, the earth's population will reach almost ten billion people and their appetite for quality, nutritious food will grow even quicker. Yet the amount of arable land will decline by almost 10% as the quality of soil degrades and the forces of urbanisation push ever outward. A changing climate adds further stress.

So, it is a good thing they are not alone in facing these challenges. Think of the farmer as the hub of our global food development and supply chain ecosystem and the input suppliers, food companies, regulators, advocates and consumers as the spokes. Every single one of these players has a stake in making sure there's enough safe food for people around the world and, thus, in increasing both yield and farm sustainability. This makes them natural collaborators with farmers in the effort to address the changes and improvements needed to satisfy the increasing global demand for food.

Sizing up the challenge

The numbers make the enormity of the task at hand all too clear. By 2050, global population will grow by one-third, to almost ten billion; caloric intake will rise even faster because of improved standards of living around the world. The result is that farm output will have to increase by about 70% to satisfy food demand.

Part of the increase in demand will be a direct outcome of increasing urbanisation, which is likely to add around 2,5 billion new city dwellers around the world by 2050. Larger cities mean improvements in



commercial infrastructure, which, in turn, generates more jobs, with higher pay. And as incomes rise, people favour more expensive foods – especially meat. Annual per capita meat consumption is projected to reach 45,3kg per person in 2030, up from 36,4kg in 1997 to 1999.

With that, the need for livestock feed will skyrocket, ratcheting up pressure on farm yields since cattle, chicken and pigs typically consume about 70% of the grain grown in the United States (US) and 75% of soya bean crops globally in any given year.

Cause for concern

In many ways, this could not have come at a worse time. Farm yields are growing but not nearly at the pace they need to. Currently, output of four key staples – corn, rice, wheat and soya beans – is increasing at rates of only about 0,9 to 1,6% a year. This translates into overall yield gains for each crop of about 38 to 67% by 2050.

Those of us with a stake in the future of agriculture are well aware that we have reached a crossroads, an inflection point, in our efforts to meet the challenges of feeding an ever-hungrier world. Can we increase agricultural yield and food security while farming sustainably? Can technology help meet the demands of consumers around the world for high-quality, safer

food? Can we improve the economic conditions of farmers and farm workers?

Challenges can be overcome

We believe strongly that the answer to all these questions is yes. But addressing and overcoming these challenges will require that everyone with a stake in solving these problems – farmers, agricultural companies, food manufacturers, governments, non-governmental organisations, and everyday people – learn to work together to bring about the progress in farming practices, policies and technologies that the world so desperately needs.

Agriculture is at a crossroads and we hope to contribute to the dialogue about these critical issues. Our goal is to provide an open, informative, balanced view of both the challenges facing the global agricultural industry and the many ways they are being met. Success in feeding the world will require the willing, informed partnership of everyone involved in this mission.

For us, the term 'crossroads' is not just about the challenges we face. It is about providing room for the intersection of all the players in the industry of agriculture. 🌱

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