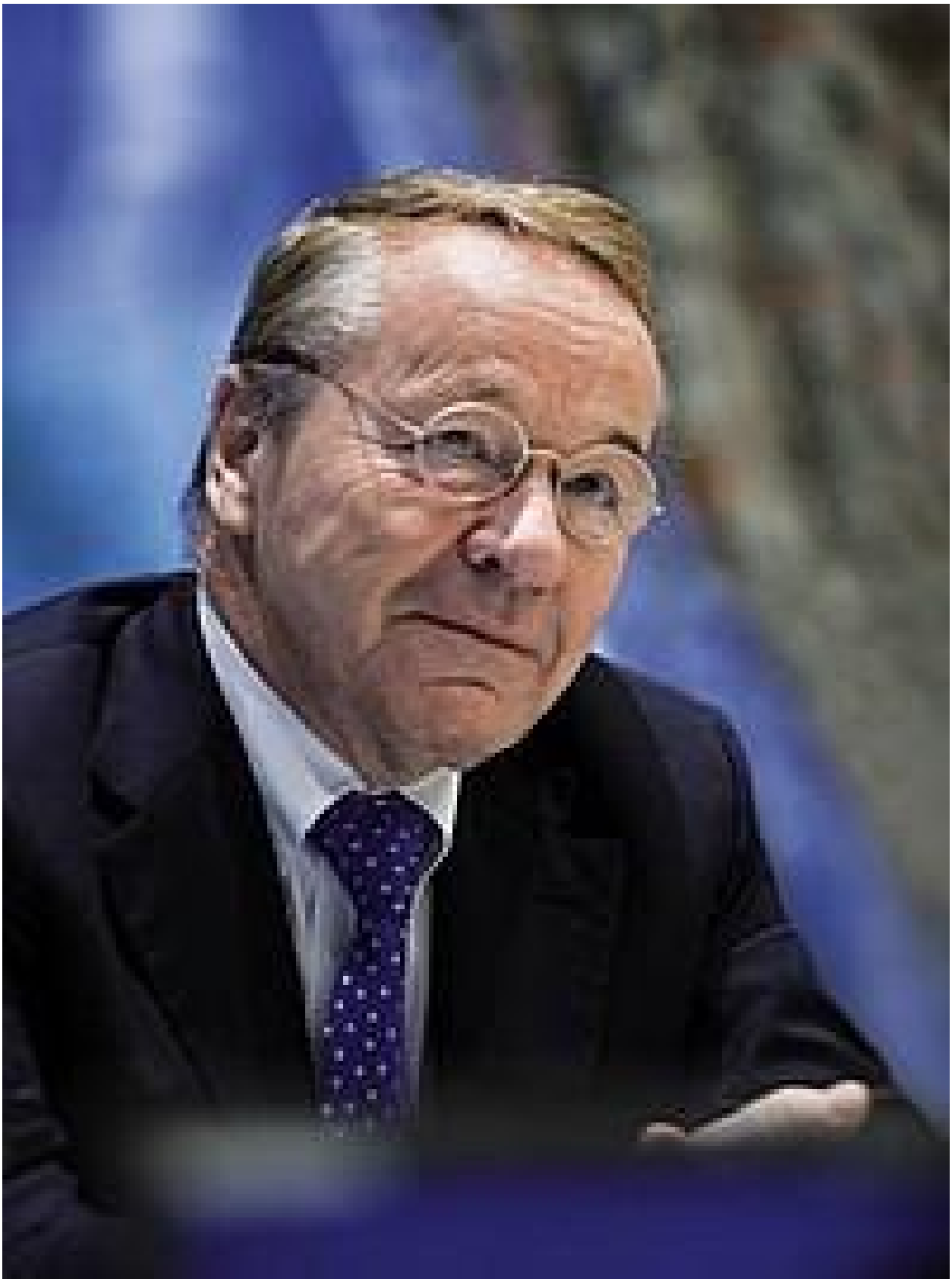
Making more from less

By Shellie Karabell

Global growth isn’t all about jobs and the stock market: it’s also about people. The global population will increase, despite the ageing baby boomer generation; there will be increased demands for minerals, energy, food, even blood.

In the case of blood, Octapharma has taken the ultimate natural resource and, with technology, created a worldwide source of life-saving plasma derivatives for use by accident victims, long-term disease patients (such as diabetics or haemophiliacs), and a variety of medical treatments which depend upon gamma globulins.

“This is bio-technology at its highest level,” says Octapharma chairman **Wolfgang Marguerre** (MBA ‘72) who founded Octapharma 27 years ago in Switzerland. “We make plasma derivatives from human blood that you either take directly from humans or from a blood donation (via a blood bank), you separate the red cells from the “yellow stuff” which is plasma for either transfusion or industrial plasma.”



These products are life-saving drugs: in some cases patients are accident victims in need of transfusions; others will use them as life-long therapy.

“There are no other products available, and they are very expensive. And there are many countries (despite national insurance coverage) that simply cannot afford to provide this level of treatment for its population.” Unfortunately, these tend to be the countries where the population growth is high and the spread of disease and the incidence of accidents are higher than in the industrialised world.

“It sounds easy when you think that blood plasma should be available just by going to your population, take the plasma and make the products” says Marguerre, referring to obtaining blood plasma directly from human donors. “But that’s not the case. There are safety issues, quality concerns. Today there are only a handful of companies that can produce these products.”

The source of reliable blood plasma in these days of HIV, hepatitis and other pathogens is dwindling: only the US and Europe have the necessary source controls. “Germany, Scandinavia and the US have the best quality controls,” says Marguerre, “so we use plasma only from these regions. And the authorities have a very close look at all the companies producing these products,” he says, citing increased purity and quality standards.

The need to feed an estimated nine billion people by 2050 on an ever-dwindling amount of arable land is the chief concern of **John Atkin**, chief operating officer of Syngenta Crop Protection – funded a decade ago by the merger of the agricultural divisions of pharmaceutical/drug companies AstraZeneca and Novartis. Today, headquartered in Basel in Switzerland, Syngenta is publicly-listed, with a global footprint and a work force in excess of 25,000 in 90 countries, from Guatemala to Japan, Brazil, Colombia, China, Russia and all points in-between.

“We’re going to need to double food production by 2050,” he says, referring to the population increase by that time from six billion today to nine billion. “We have about 1.5 million hectares under cultivation in the world today, and we’re losing something like two to three million hectares every year through desert encroachment and through urbanisation. There are probably about 100 million hectares you could safely bring into production in the world, and that would mainly come from Brazil and Russia. I say ‘safely’ because it has to be done sustainably.”

This raises several issues, at least to the casual observer: how do you double food production when the amount of arable land will increase only fractionally at best? And what about post-Chernobyl and general industrial pollution in that rich, black Ukranian soil?

To the first point, Atkin says that “through the use of ‘technology’ thus far we have been able to double or triple crop yield … better seed varieties, better fertilizer, better crop protection … chemistry.” There, he says it. But “better dining through chemistry” is not what a lot of people in Europe and the US want to hear.

“People are actually saying ‘we’re not sure about technology and food production,’ and that’s a real issue because we can’t go from the 6.5 billion we feed today to the nine billion we’ll need to feed by 2050 without technology. Organic production yields are about 30-40 per cent less (than what’s produced with ‘technology’), so you’re going in the opposite direction to the direction you have to go. I mean, it’s OK for people who can afford it, but it’s not the answer for the vast number of people worldwide – certainly not for the billion people who are under-nourished today.”

On the Eastern European front, Atkin points out that wheat yields in Russia can be increased, again using ‘technology.’ “The average wheat yield (in Russia) is around two tons,” he points out. “Whereas in France it’s eight tons. So you can instantly see there’s room for improvement.” He believes it’s ‘stewardship of the land’ rather than Chernobyl’s nuclear accident that is worrisome today. “The state farms were not bad at managing Russian agriculture,” he claims. “The issue they had there was after the Soviet regime, things went into decline. So it’s only with privatisation and money coming into it that we’re now seeing things able to recover.”

Biofuels are another area of interest for Syngenta – “part of a positive story for agriculture,” says Atkin. “Though they are controversial now, there’s no question in our mind that sugar cane, for example, in Brazil produces excellent ethanol with a greenhouse gas footprint 80 per cent better than fossil fuels. This is just the first step … we’ll find other ways of making bio fuels from biomass and other ‘technologies.’’

Atkin’s work takes him into some of the world’s poorest regions, where food production isn’t just about eating. “When you go to places like Indonesia,” he says, “producing more food means more money for these people. It means that instead of the kids being in the fields, they can go to school. Agriculture

is the first step on the ladder to prosperity."

Dharma Djojonegoro (MBA '05J) is on the same ladder, a few rungs higher. He recently became CEO of Ancora Indonesia Resources, a publicly-listed company with two subsidiaries: an onshore oil and gas drilling company that provides drilling services to multinationals operating in Indonesia, and a producer and distributor of mine explosives. The demand for energy in the Jakarta region is growing, and that is fuelling corporate growth.

"In terms of natural resources," says Djojonegoro, "the biggest demand right now is coming from the energy sector. And the big drivers in that demand are India and China." While these countries are building power plants to increase their generating capacity, Ancora is increasing its output of natural resources. "We have huge reserves of coal," he says, "and we are, I think, the second-largest natural gas exporter in the world."

But it's in the mine explosives part of the business that Djojonegoro sees real growth opportunity – enough for him to meet his target of growing Ancora's $100 milion market cap at least fivefold within a few years. "Indonesian demand (for mine explosives) is about 400,000 tons," he claims. "We are producing 40,000 tons. So there's a huge gap that can be filled. We're actually building our second factory right now and hopefully it'll come online next year."

He is also looking at acquiring mining assets and logistic assets – the means of getting natural resources to market and to the end user. And he's prepared to go to the capital markets to increase his purchasing power. "It's not going to be easy," he says, "but we are quite confident that as long as the right story's there, people will invest."

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