# "We want to improve 'R,D&D': the second D means delivery"

## Helping smallholders access better seeds: Camille Renou

The Syngenta Foundation program 'Seeds2B' helps smallholders access better seeds. Camille Renou coordinates this work in West Africa. We asked him about the needs and challenges, and the ideas behind the many partnerships. We also talked about unwanted aubergines and things that annoy him.

**Syngenta Foundation:** How would you describe the essence of your work for Seeds2B?

**Camille Renou:** We make it easier for smallholders to plant good seeds. That helps them grow better harvests and earn more money.

How do you define "good" seeds?

In this context, there are two main points: the quality of the seed itself, and the choice of variety. Seed quality relates to features like germination, purity and freedom from disease. What makes a variety "good" is its genetic composition, which determines the performance of a plant in a given environment. The aim is to produce high yields and quality harvests that meet farmers' and the market's needs. Additional factors that make seeds good are proper production methods, packaging and storage. Fakes are unfortunately a frequent problem!

What are important criteria for meeting farmers' demands?

Ultimately, it's all about advantages and livelihoods. A crop that matures fast can save farmers work, and allow them to earn money earlier. They usually also get better prices from an early harvest. A variety that makes regional dishes taste particularly good will be another strong seller. And of course the seeds have to cope well with the local soil, weather and pests. They are the foundation of any good harvest.

Why is it often difficult for farmers to access these important inputs?

Seeds2B mainly works in Kenya, Mali and Senegal. The main barrier in these countries is that there is no properly functioning seed market of any size. There simply isn't a value chain connecting breeders, seed companies, wholesalers, retailers and smallholders. The issue is not affordability, as some people claim. It's quality, availability and accessibility.

#### "Our job is to bring people together and help remove barriers"

*Presumably you don't think the Syngenta Foundation can solve this problem alone?* 

Definitely not. We're catalysts, not magicians! The Foundation does not own any varieties, or land for seed production. Nor do we run a seeds processing facility or shops; we're not a commercial entity and have nothing to sell. The essence of our work is to bring the relevant

people together and help remove barriers. Improving access to high-quality seeds requires extensive partnerships.



Among the partners are local NGOs. They run tests of new varieties under real field conditions, tests that the smallholders can visit. In farming, 'seeing is believing' and the farmers, as the final user of the seeds, needs to be implicated in the trialling of the varieties to see how they behave and what are the benefits they can get by growing another variety.

However, we don't only rely on farmers to identify the best varieties candidates. Importantly, we also

involve lots of different people in our partnerships. Each of them adds their own particular perspective to selecting new varieties. A researcher typically emphasizes different aspects to a seed multiplier, and a smallholder provides other insights than a food processing company. We try whenever suitable to work with the whole value-chain. Together we need to get those varieties out to market that score best overall.

You talk about barriers that need removing. What are some typical examples?

They include a lack of funding, expertise and market information, and difficulties in understanding legislation. Language can often also get in the way.

Africa's population is growing much faster in cities than in the countryside. What do you know about urban consumers' preferences?

Our market research has surprised me. The conventional wisdom is that city customers are much more demanding on the quality and appearance side than their rural relatives. We've found that that is, in fact, not their top concern. Sure, there are some products that fail on appearances: consumers in Dakar or Bamako won't buy white aubergines (eggplants) or completely green tomatoes. But the most important point is cost. Just like out in the countryside, people shopping for urban families want low prices.

### "You can't view seeds in isolation; there are lots of aspects to farming as a business"

What consequences does that have for your work?

One is the seasonal aspect mentioned above: to earn better prices, a farmer has to be among the first to harvest a particular crop, or one of the last. We need to deliver the corresponding varieties. Heavy price competition during the main season also means that we must help smallholders farm more efficiently. It's always essential not to view seeds in isolation, but also to help improve agronomic practices, storage and other aspects of farming as a business. Urban pressure on prices makes that doubly important.

On which crops is your Seeds2B program currently concentrating, and why?

The choice differs by location. We have four main approaches. The first is to strengthen local breeding and the spread of good local varieties, combined with the introduction of better ones, for example in sorghum. A second focus is on crops for which smallholders have only a small choice of varieties with out-dated genetics. Examples include okra, aubergine and watermelon. Then there are crops with production issues, such as wet season onions or tomatoes. Fourthly, we also look at opportunities for value chain development and crop diversification. Sunflower is a case in point: this crop could earn West African farmers good incomes and help to substitute imports.

With these four approaches, where is your primary focus?

Of the crops above, we mainly concentrate on sorghum, okra and 'wet season' onions and tomatoes. Sorghum is largely for family consumption, the other three are cash crops. All four are underserved markets, with very few suitable varieties currently available. But, for example, if Senegal's farmers grew onions and tomatoes that could stand the heat and damp of the rainy season, the country could reduce its month-long dependence on imports.



But why is there a problem with such a heavily-researched crop as sorghum?

National and international research stations have done great work on this crop. When our Foundation began work over 30 years ago, sorghum R&D was a key starting-point. But generally speaking, research organizations have traditionally ended their projects after successful breeding. There's even a saying in West Africa that usually "varieties stay on the breeder's shelf". They should be getting out to farmers.

What we want to improve is 'R, D & D' – where the second D stands for 'delivery'. Private companies are best at getting improved varieties out to farmers. In the past, unfortunately, they have been slow to engage in African sorghum markets. Furthermore, communication was lacking between the breeders, mainly from the public sector, and an emerging private seed sector.

#### "Communication and policy also play big roles"

You've talked a lot about breeding and markets. What role do politics and policy play in the availability of good seeds?

A major one. That's why the Syngenta Foundation continues to devote a lot of effort to <u>policy-related topics</u>, notably in Africa. These topics include <u>agricultural integration</u> and greater harmonization of seed laws. Both would make it much easier and cheaper to launch new varieties that benefit smallholders in several countries at a time. Often, the emphasis is on implementation rather than invention – some economic cooperation areas (such as ECOWAS in West Africa)

already have wise regional legislation printed and signed. But the path to national implementation of bureaucracy-reduction can be stony. Just like in the European Union!

Much of what you say sounds very positive. Is there anything that particularly annoys you in your work?

In Europe, I often meet people who seem opposed to African farmers becoming more professional and access modern technologies. This isn't about GMOs, by the way, which are often not licensed for local use anyway. It's about improved varieties from conventional breeding. For ideological or romantic reasons, the opponents of progress essentially believe that African smallholders should carry on with all the old practices.

Coupled with that rejection of the opportunity to professionalize often comes the idea that 'charity is best'. Farmers, these Europeans argue, should receive lots of seed and tools for free. I agree that processes mostly need some 'catalytic nudge' to get rolling, and that the nudge may include a material element. But handing out gifts long-term is just as irresponsible as insisting that the old ways are the only way. I am happy to discuss that with anyone; what annoy me are ideological blinkers that stop other people modernizing their lives.

**Camille Renou** (29) lives with his family in Angers, home to one of France's leading agricultural colleges. He studied Agricultural Engineering there, specializing in seeds. His subsequent career in the seed industry focused mainly on barley and seed production / processing. Camille joined the Syngenta Foundation in 2012. A keen fan of the <u>Angers soccer</u> team, he also enjoys experiencing new cultures around the world.