African indigenous vegetables are genetic treasure trove of nutrition, hardiness

In Nairobi, indigenous vegetables were once sold almost exclusively at hard-to-find specialized markets; and although these plants have been favoured by some rural populations in Africa, they were largely ignored by seed companies and researchers, so they lagged behind commercial crops in terms of productivity and sometimes quality.

Scientists in Africa and elsewhere are now ramping up studies of indigenous vegetables to tap their health benefits and improve them through breeding experiments. The hope is that such efforts can make traditional varieties even more popular with farmers and consumers. But that carries its own risk: as indigenous vegetables become more widespread, researchers seeking faster-growing crops may inadvertently breed out disease resistance or some of the other beneficial traits that made these plants so desirable in the first place.

The World Agroforestry Centre in Nairobi is studying a range of Africa's more than 3,000 indigenous fruit species, and finding that they are generally more nutritious, drought-tolerant and pest- and disease-resistant than their exotic counterparts.

But efforts to improve indigenous vegetables could come at a cost, say researchers. If breeders focus only on increasing yields, they could accidentally eliminate nutritional benefits.

Calestous Juma, director of the Science, Technology, and Globalization Project at Harvard University in Cambridge, Massachusetts, sees these efforts as crucial. And with advances in genomics, he says, researchers should seek ways to improve indigenous crops — by lengthening their shelf life, for example — and to use them in breeding other plants. "They may have traits that may be useful for other crops."

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: The rise of Africa's super vegetables