



Climbing to new heights In Rwanda

Farm size is declining as the country's population increases. By growing upwards, climbing beans can produce three to five times more food on the same land area than bush-type varieties.

Climbing beans make a lot of sense in Rwanda, which is fast running short of land. Already, there are 11 million people squeezed into a country half the size of Costa Rica, and by 2100 that number is expected to reach more than 40 million. The need to sustainably boost food production is pressing.

By growing upwards, climbing beans produce three to five times more than bush-type varieties. Beans are among Rwanda's top commercial crops, contributing to better nutrition and incomes. High-quality climbing beans are planted on more than half the country's bean-production area, a 45% increase since 1985. The country now earns an extra US\$12 million annually in bean exports.

Ensuring that even remote communities have access to quality bean seed is crucial for achieving food security and building resilience. In the hilltop town of Musanze, northern Rwanda, a bag of mixed bean seed from the market gives only about half the yield of improved climbing beans.

Innovation platforms - led by the Rwanda Agriculture Board (RAB) and Pan-Africa Bean Research Alliance (PABRA) - regularly bring together decision-makers across the bean value chain to discuss improvements or challenges in delivering better beans to farmers. Seed packs of 1 or 5 kilograms - for farmers who can't afford 10- or 20-kilogram packs - are one example of how platform discussions lead to better ideas tailored to smallholder clients.

Through the PABRA network, international and national breeding programs focus on demand-driven traits, such as taste and shorter cooking time. As a result of PABRA's efforts, local seed multiplication companies can get high-quality, high-yielding bean varieties without investing in long-term breeding programs.

