Innovation Platforms are designed to implement program interventions by bringing together critical actors to improve business ecosystems and incentivize actors in bean corridors. This approach is operationalized through innovation platforms that aim to eliminate bottlenecks in the bean value chain including reduction of market barriers, diversify enterprise opportunities, increase livelihood opportunities and availability of diverse nutrient-rich foods, and reduce pre- and post-harvest losses.

The Pan-Africa Bean Research Alliance (PABRA) of the Alliance of Bioversity International and International Center for Tropical Agriculture (CIAT) collaborated with the Institut des Sciences Agronomiques du Burundi (ISABU) in 2015 and engaged Christella Ndayishimye to scale up production of composite bean flour for weaning infants and lactating mothers. This has since helped Christella upgrade the flour processing facilities, link to markets and technical capacity that saw her production increase exponentially.

**CHALLENGES AND RESULTS**

Food shortage and population displacement as a reason of the political unrest that rocked Burundi in 2003-2008 plunged the country into a crisis. During such times, out of sheer need for good quality, nutritious porridge flour for her baby’s weaning, Christella Ndayishimye started mixing her own bean-based composite flour. This sowed the seeds for Totahara in her mind and Christella started as a small enterprise 2009.

Since 2009, Christella has scaled up production of composite bean flour for weaning infants and lactating mothers. Besides meeting nutritional needs of children and women, this innovation generates income for her, her employees and farmers supplying bio-fortified beans to her enterprise.

**PARTNERSHIPS DELIVER INNOVATIONS**

- Pan-Africa Bean Research Alliance (PABRA)
- Alliance of Bioversity International and International Center for Tropical Agriculture (CIAT)
- Institut des Sciences Agronomiques du Burundi (ISABU)
- National Agricultural Research Organization (NARO)
- Kenya Agricultural and Livestock Research Organization (KALRO)

**INNOVATION LAUNCH AND COMMERCIALISATION**

- Launched in 2009, Totahara was Christella’s answer to the sheer need for good quality, nutritious porridge flour for her baby’s weaning process. Equipped with her own recipe of bean-based composite flour after a PABRA-facilitated training programme, Christella along with nine employees started Totahara as a small enterprise in 2009 from her backyard producing up to 1 ton of flour per month.
- With her own funds and a little boost from agencies, she has increased Totahara’s operational capacity to produce around 325 tons of flour per year for more than 105 shops across the country.
- Christella also mentors other milling SMEs and provides reliable market opportunities to over 1,250 women farmers planting bio-fortified bean varieties.
- Despite COVID challenges, Christella employs 25 permanent staff including 8 women and 17 youth.
- PABRA has now scaled up this approach to support 14 other women entrepreneurs in Tanzania, Uganda, Madagascar, Rwanda and Kenya.

**BROADER RELEVANCE**

As a Stage 4 and a Maturity level 3 innovation, these businesses have been taken up by users and are contributing to nutrition and food security goals, poverty reduction, livelihoods & jobs, gender equality, youth & social inclusion. Policy and/or practice changes influenced by these innovative business models have led to adoption or impacts at scale or beyond the direct CGIAR sphere of influence. This is evidenced by a 6% reduction of stunting levels in World Vision’s 22 pilot community schools for under-five children by using Totahara flour.