Demand-led plant breeding (DLB) combines best practices in market-led, new variety design with innovative plant breeding methods.

DLB puts more emphasis on understanding the preferences of clients and their value chains rather than just promoting what new technology can offer (Figure 1).

DLB delivers new varieties that meet the needs of farmers, consumers and processors for local, regional and export markets.

Three principles drive success in demand-led breeding:

1. Target driven
2. Demand-led variety development strategy
3. Performance indicators to measure new variety adoption by farmers and their value chains.

Some core best practices in demand-led breeding:

- **Client quantification**: Market segments, numbers and preferences of targeted farmers and their clients are defined before breeding programs start.
- **Variety design**: Detailed lists of traits with quantified levels of required performance are used to make line progression decisions.
- **Development strategy and stage plan**: A delivery strategy containing a time plan of activities and data required at key decision points is created before breeding project starts.
- **Variety adoption**: Target levels are set for adoption by farmers and monitored for success.

### Education module

- State-of-the-art concepts and best-practices in DLB have been compiled by experts and educators from the public and private sectors across Africa and internationally.
- A training manual* and education module are available, covering:
  1. Principles of demand-led variety design
  2. Visioning and foresight to set breeding goals
  3. Understanding clients’ needs
  4. New variety design
  5. Variety development strategy
  6. Monitoring, evaluation and learning
  7. Business cases for new variety development

The content is intended for postgraduate educators and scholars in plant breeding, crop improvement and seed systems and for continuing professional development of plant breeders in Africa.


More information

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