

| Assumptions for Cost-Benefit Analysis, Economic Surplus Model and Poverty Model |   |
|---|---|
| <b>Time period</b>  | Starting in 2014, 25 years; ~ 10 years for research investment (max. time period for RTB)   |
| <b>Supply elasticity</b>  | 1.0   |
| <b>Demand elasticity</b>  | 0.5   |
| <b>Depreciation rate</b>  | Use 1 across all technologies/crops   |
| <b>Discount rate</b>  | 10%   |
| <b>ESM model type</b>   | Closed economy model with no demand shift. Hence, the technology effects that are directly captured by the model and for which explicit parameter values have been estimated are changes in yields (and/or postharvest losses) and costs of production resulting from the adoption of the innovation.   |
| <b>Adoption function</b>  | <p>Logistic adoption curve.</p> <p>Pace of adoption determined by the adoption reached in the first year after adoption starts: 1% of estimated adoption ceiling for all technologies and crops.</p> <p>Two adoption scenarios: (1) adoption scenario based on expert assessment of adoption ceiling; (2) conservative scenario: assuming 50% of adoption ceiling indicated by experts.</p> |
| <b>Poverty line</b>   | \$1.25/day  |
| <b>Poverty elasticities</b>   | <p>Asia: 0.48</p> <p>LAC: 0.15</p> <p>Africa: 0.72</p>  |
| <b>Level of poverty reduction</b>   | Poverty reduction reached at highest adoption level   |

Source: Strategic Assessment of Banana Research Priorities Report