

Workflow: Product Quality

Toolkit 5.4

Improving Quality and KPIs

target audience

Leadership, quality contractors, service providers, supervisors, product agents, and strategic partners.

what it is

In addition to effective quality management, which strives to produce uniform product quality, it is also critical to continually improve both the quality system as well as the actual product quality as judged by customers. Improving the quality system involves making both systemic, documented changes, and driving day-to-day compliance. Improving product quality means continually refining the characteristics of the product for the customer's application or reducing the variability of a key product characteristic.

However, reviewing and improving quality KPIs must be done through comparison against a standard achieved in similar operations. Benchmarking is the practice of comparing business processes and performance metrics to best practices in the industry, and even to other industries/sectors.

Across the value chain, product quality is a key metric, but not the only metric, and there should be clear awareness of the impact improved quality KPIs can have on the rest of the business. This relates directly to the cost of quality, but also to environmental and community impact (effects of pesticides in effluent water), etc. In an ideal world, the farmer needs to find the balance between individual KPIs, across the value chain.

why it is important

Quality improvement is essential in a competitive world where customer needs are continually changing, and there is regularly downward pressure placed on operating expenses. If the organisation is not making improvements to product quality, it runs the risk that its products will become less desirable, and customers will take their business elsewhere.

In addition, food safety and regulatory requirements will become stricter, and retail clients might prefer doing business with a company that has proven that they have a sufficiently robust quality system to introduce changes.

success factors

- **Identifying the Critical to Control (CTC) Quality Specifications** – For overseas consumers these should include size, colour, appearance (blemish free), being easy to peel and sweetness.
- **Quality as a Strategic Objective in Relation to other Business Objectives** – Quality performance objectives should be included in the company's strategy and annual business plans. A monthly review of actual achievements against targets could result in an abnormal situation and should be added as a loss in the regular loss & waste analysis. Refer to [Toolkit 13.2 - Identify Key Losses and Register Improvement Projects](#).
- **Benchmarking** – Benchmarking should be used to track performance against accepted industry standards and similarly added to a L&W Analysis as described above.
- **Process Compliance During the Production Season** – It is important that all the necessary farming processes like irrigation, weeding, pruning, pest and disease control, etc. (Refer to [Workflow 3 - Production - Basic Farming Practices](#)) are well described in a Standard Operating Procedure with effective systems to ensure compliance. Deviations from the standard should be addressed daily and subjected to formal problem solving. Refer to [Toolkit 12.2 - Structured Problem-solving](#). If problems persist it should be escalated following the standard escalation procedure.
- **External System and Process Audits** – External system and process audits provide the basis for defining gaps in the quality system and practices. System audits can be performed by trained external or internal auditors and are designed to provide a comprehensive assessment of the quality system. System audits will typically focus on documentation, combined with field checks, to assess compliance with specific system requirements.

Process audits are normally done on a more frequent basis by internal personnel, e.g., scouting. Refer to [Toolkit 3.7 - Crop and Plant Protection \(Pest, Disease and Weed Control\)](#). These audits are performed in the field to verify the knowledge of operating personnel and compliance with specific system requirements.

It is important to view these audits as opportunities to pressure test the robustness of the farm's quality system and to use the results of these audits to inform future quality improvements.

- **Incremental and Progressive Improvement**

Improving quality during harvesting depends on:

- Empowered operators, using well-maintained equipment and tools.
- Qualified, hands-on supervisors and team leaders to quickly identify skill gaps.
- Visual support tools, e.g., pictures of poor-quality product that should be disposed of.
- Daily team meetings to discuss abnormal situations.
- Effective on-the-event problem solving.

Improving quality KPIs will result in improved business KPIs, including:

- Sustaining optimum yield levels.
- Higher pack-out percentage.
- Reduced rejects.
- Access to new markets.
- Premium prices.

execution steps

1. Set clear quality performance objectives and monitor monthly. Refer to [Toolkit 5.2 - Setting Standards and Planning for Quality](#).
2. Follow quality and accreditation trends in the industry through annual benchmarking and introduce changes if necessary.
3. Include benchmarking deviations in formal problem solving.
4. Review and improve SOPs annually, including refresher training for all growth-season teams.
5. Visualise and monitor compliance against targets and discuss deviations daily.
6. Evaluate the existing internal and external quality system audit processes and answer the following questions:
 - Do the audits generate actionable opportunities to improve our quality system?
 - Do we follow through with making the improvements identified through the audits? If not, what do we need to do differently moving forward to execute recommended improvements?
 - Are the audits perceived by most employees as a net benefit to the business or a distraction? If they are perceived as a distraction, what is the reason?
7. Based on this evaluation, make changes to the quality system audit processes to maximize their effectiveness.
8. Evaluate whether the farm is getting the level of customer input into product quality that's necessary to make quality improvements and, if not, consider which tactics to employ to increase the volume and/or improve the quality of customer input.
9. Introduce strict compliance standards during the harvest season.
10. Visualise and monitor compliance against targets and discuss deviations daily.

assessment questions

Please Note: There is no minimum / maximum amount of questions you can add

1.	Are your quality objectives clearly defined in the business strategy?
2.	Are quality objectives and targets balanced with other operational targets?
3.	Have quality KPIs been deployed to work team level?
4.	Are quality KPIs reviewed periodically to keep up with production process changes?
5.	Are quality process improvements resulting in improved business KPIs?

resources

1. Benchmarking reference. Link <https://binged.it/3gQEhcP>