Session Five

Module Five

Quality Control

Handout

The successful implementation of a credible quality assurance program for the ornamental fish trade depends strongly on the ability of the competent authority to work closely with collectors, coordinators, exporters, and all other industry players in adopting a uniform approach towards quality assurance and the maintenance of fish condition prior to export.

Quality Assurance: A plan to guarantee quality.

The implementation of MAC methods and standards to reduce stress in fish during collection, holding, packing, and transport can provide quality assurance.

Quality Control: The tools and measurements used to assess quality; the observation techniques and activities used to fulfill requirements for quality.

Quality control is the conduct of inspection of the collectors' catch in accordance with MAC standards. It is the monitoring of collection and shipment operations, and it ensures that the catch is in accordance with order sheet specifications. It includes documentation of all inspection and monitoring results, including rejects and mortality.

Quality control techniques in the aquarium fish trade include:

- Screening to reject and purge unwanted or substandard stock
- Use of MAC documents as tick sheets (e.g., order sheets, logbooks, packing lists)

Quality Control Measures:

MAC Standards for collection, fishing, and holding

- Use only non-destructive collection methods
- Use only trained staff and equipment in good condition
- Collect only what is ordered
- Keep logbooks
- Employ best practices in post-harvest handling

Mac standards for handling, husbandry, and transport

- Use appropriate acclimation, screening, packing, and shipping methods
- Monitor and record mortality and water quality
- Use chemicals responsibly (e.g., for disease control)
- Maintain documentation (e.g., orders, invoices, mortality rates, dispatch records)

Problem Solving Is a Core Process for Quality Management

There are many operational problems that can have implications for the quality of the shipment. Some might be technical in nature, others might be people related. These problems can be detected within the operation at the site or, more problematically, identified by the exporter. The latter can result in big decreases in earnings for collectors and coordinators.

Quality management depends on people to have good problem-solving skills. It is through the continuous process of identifying problems, and solving and implementing solutions, that the business is improved. Problem-solving consists of identifying the root causes of a problem and implementing actions to correct the situation.

The Problem-solving process consists of a sequence of steps the vary according to the kind of problem. These steps are:

- Problem Definition
- Problem Analysis
- Generating Possible Solutions
- Analyzing the Solutions
- Selecting the Best Solution
- Planning the Next Action (Next Steps)

These steps are only a guide for problem solving; they can help make sure that you do not overlook anything.

1. Problem Definition

Usually, the initial step in problem-solving is defining the problem clearly and concisely. You need to decide what you want achieve. Also, you should check that you are addressing the right problem; you do not want to get side-tracked on a less important issue.

This is a good time to mention **consensus**.

Consensus simply means everyone is in agreement, or at least can live with the decision made. If they cannot live with the agreement, the group or team has not reached consensus. Then, more discussion, trying to understand other points of view, and keeping an open mind are required. This process requires cooperation, good intentions, and a willingness to be flexible about personal feelings and issues.

Consensus will be important as the group works toward defining a solution to a problem. Using the process from the beginning brings the whole group along at every step.

2. Problem Analysis

The next step in the process is to understand where the problem is coming from, how it relates to current developments, and what the current physical environment is. This is crucial to finding a working solution. Similarly, you must develop criteria by which to evaluate potential solutions or you will not know whether the idea is workable or not. This section of the problem-solving process ensures that time is spent in stepping back and assessing the current situation and what actually needs to be changed.

After this step, it is often good to go back to the first step to confirm that your problem definition is still valid. Frequently, after the investigation people discover that the problem they really want to answer is very different from their original interpretation.

3. Generating Possible Solutions

After you have discovered the real problem that you want to solve and have investigated the climate into which the solution must fit, the next stage is to generate possible solutions. At this stage you should concentrate on generating many solutions ("brainstorming") and should not evaluate them at all. Very often an idea that might have been discarded immediately can be turned into a great solution after proper evaluation. At this stage, do not judge potential solutions but treat each idea as worthy of consideration.

4. Analyzing the Solutions

This section of the problem-solving process is the one in which you investigate the various factors related to each potential solutions. You note down the good and bad points and other things that are relevant to each solution. Even at this stage, you should not discard potential solutions; consider the pros and cons of each one. Some of the least likely-seeming solutions might turn out to have unique advantages over the others.

5. Selecting the Best Solutions

In this step, evaluate the pros and cons identified in the previous step. Decide which potential solutions to keep and which to discard. Sometimes facts and figures dictate which ideas will work and which will not. In other situations, it will be your feelings and intuition that influence your decision. Remember that intuition is the result of a lifetime of experience and judgment compressed into a single decision.

Vote on the solution to make a shortlist of candidates. You might want to increase the depth in the analysis of each idea and vote again on that shortlist to further refine it, if needed.

You will then end up with one, many, or no viable solutions. If you end up with no potential solutions, you will need to repeat Step 3 to make a new list. Alternatively, you might consider re-evaluating the problem; you might not have found a solution because of an earlier mistake in problem definition.

6. Planning the Next Action (Next Steps)

In this step, you should discuss what you are going to do next. Now that you have a potential solution or solutions, you need to decide how you will implement the solution. You should outline the activities members of the group will have to conduct. You should also outline how members of the group will monitor those activities. If this step is not conducted, all the thinking that went into finding a solution will be wasted!