



## **Audit - Pest and Food Safety Management Scenarios**

**Objective.** Recognize and document compliance with, and demonstrated competency in regulatory, market-based, and voluntary pesticide and food safety management systems, through an interview-based audit.

**Implementation.** We have two fruit-and-vegetable farms to interview with two groups of interviews and reporters. We call one farm group “Agricultural Business As Usual” of **ABAU**, and the other “Modern Valley Agriculture” or **MVA**. To play out these two scenarios, we need two teams. The **ABAU** farm team and the **MVA** farm team. Each farm team is to be interviewed by a different interviewer or by a team of interviewers with a moderator.

**Queries.** The interviewer (or interviewer teams) will ask these and related questions of the **ABAU** and **MVA** farm teams.

1. What is the labor situation?
2. What about sanitation? Safety? Environmental impacts? Pesticide residues?
3. What about training? Technical support? Documentation. Record keeping? Audits?
4. How are farm management decisions made? Especially for irrigation, pest management, fertilization, cropping, harvesting, packaging, and marketing?
5. Is there a nature set-aside area? An environmental program? Quality assurance/control?
6. What are the production inputs, costs, and profitability?

### **Interview Team Presentation to the Class**

1. What are your key findings or facts?
2. What are your conclusions on compliance with good agricultural practices?
3. What recommendations would you make to the farm managers to improve pesticide and food safety management at this farm?
4. Relate your observations, conclusions, and recommendations to the three-sided USAID process of Design-Procure-Implement.

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### **Agricultural Business As Usual (ABAU)**

ABAU is a small-scale, fruit-and-vegetable producer whose market is local. It is owned and operated by a family and friends, with seasonal and casual labor. Labor agreements and contracts do not conform to the International Labor Organization (ILO) or Good Agricultural Practices (GAP); there are no worker medical benefits, no restrictions on child labor, no restrictions on daily and weekly labor hours, no minimal wage requirements, no provisions of drinking water or food or sanitation or safety and security and training for workers, and no working-condition requirements. There are no requirements for equipment safety, noise and odor control, security, signage, and hazardous materials and solid waste management. Field, office, processing, and packing facilities have no fire extinguishers, noise suppressors, heating or air conditioning, circulating air, clean wash stations or toilets. Laborers and workers are not consulted in farm related operations, and they have no input to improve farm management, productivity, crop quality, or profit. Staff turn-over is very high. Staff rarely recommend family and friends for work. Staff satisfaction is low.

Management, laborers, and workers do not understand the design-procure-implementation process, from farm to fork. Management is concerned with identifying opportunities for improvements in profitability. Laborers and workers do only what they are told. Few aspects of the farm are monitored and documented, and those are available to only to management to review; there is no ongoing auditing or ongoing training.

Farm management decisions are made based on the availability of resources and vendor-supplied information. Irrigation water is applied when available. Pesticides and fertilizers are applied at the beginning of cropping seasons based on instructions provide by pesticide vendors and instructions on pesticide packages. Harvesting and processing is scheduled based on availability of casual labor. The facility has no onsite or offsite laboratories or consultants. There are no onsite and offsite set asides for natural or recreational areas. There is no environmental education program or signage. There are no programs to reduce greenhouse gas emissions; to reduce, reuse, or recycle solid waste or hazardous waste; or to use eco-friendly products and processes. Crops are sold with untested and unknown pesticide residues. Packaging and shipping do not assure high-quality fruits and vegetables.

Sales are made on an ad hoc or informal basis, when crop storage is inadequate, or on spot or short-term contracts. The farm does not have a business model but a cash-flow model, and does not know its seasonal or long-term costs or profits. Farm management believes it is making a 5 to 10 percent profit over its short-term costs, though it thinks it is losing money in some years but doesn't know how much or why. The manager is considering expanding if cheap land can be found soon.

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### **Modern Valley Agriculture (MVA)**

MVA is a large-scale, fruit-and-vegetable producer whose market is in Europe. It is owned and operated by a family and friends, with seasonal and casual labor. Labor agreements and contracts do not conform to the International Labor Organization (ILO) or Good Agricultural Practices (GAP); there are worker medical benefits, restrictions on child labor, limits on daily and weekly labor hours, minimum wage requirements, and provision of drinking water and food and sanitation or safety and security and training for workers, and working-condition requirements. There are strict requirements for equipment safety, noise and odor control, security, signage, and hazardous materials and solid waste management. Field, office, processing, and packing facilities have well-maintained fire extinguishers, noise suppressors, heating or air conditioning, circulating air, clean wash stations or toilets. Laborers and workers are consulted in farm-related operations so their input can improve farm management, productivity, crop quality, and profit. Staff turn-over is very low. Staff often recommend family and friends for work. Staff satisfaction is high.

Management, laborers, and workers all understand the design-procure-implementation process, from farm to fork. Laborers and workers are encouraged to take initiative and improve the process. Management, laborers, and workers are constantly concerned with identifying opportunities for improvements in management, productivity, crop quality, and profitability. All aspects of the farm are monitored, documented, reviewed, audited, and available to management and laborers to review; there is ongoing auditing and ongoing training and re-training.

Farm management decisions are made based on real-time measurements of soil moisture and crop growth stage for irrigation, pest monitoring for integrated pest management, fertilizer application from leave-nutrient and crop stage monitoring, and market and crop monitoring for harvesting and processing. The facility has onsite laboratories for soil moisture, soil and irrigation water quality, and crop nutrition and quality, and onsite and offsite consultants. There are onsite and offsite set asides for natural or recreational areas. There is an ongoing environmental education program with self-guided signage. There are ongoing programs to reduce greenhouse gas emissions; to reduce, reuse, or recycle solid waste or hazardous waste; and to use eco-friendly products and processes. Crops are sold without pesticide residues. Packaging and shipping assure high-quality products.

Sales are made on long-term contracts and rarely on spot or short-term contracts. The farm tracks its short-term and long-term costs, profits, and cash-flows. The farm's business model shows that labor and transportation are the largest costs; profits are increasing along with expanding productivity, high quality crops and packing, and rotating crop management. Farm management, laborers and workers know it is making a consistent 20 to 25 percent profit over its short-term costs, with some years raising an additional 3 to 5 percent due to market fluctuations and successful packaging and marketing campaigns. The farm is considering buying its own fleet of trucks to reduce its transportation costs and improve its profitability.

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