

## Group work 2

**Risk assessment using flowcharts and scenario trees – Entry assessment, Exposure assessment and Consequence assessment**

- Tilapia farm
- Look at each production/process step identified by walking the line
- Inputs/outputs at each step
- Assess the risk at each step



# Entry assessment

Entry assessment (formerly known as release assessment): The process of describing the biological pathway(s) necessary for an activity to 'release' (that is, introduce) pathogenic agents into a particular environment, and estimating the probability, either qualitatively or quantitatively, of that complete process occurring

# Exposure assessment

Exposure assessment: The process of describing the biological pathway(s) necessary for exposure of animals and humans to the hazards (in this case the AMR bacteria or resistance genes) released from a given risk source, and estimating the probability of the exposure(s) occurring, either qualitatively or quantitatively.

# Consequence assessment

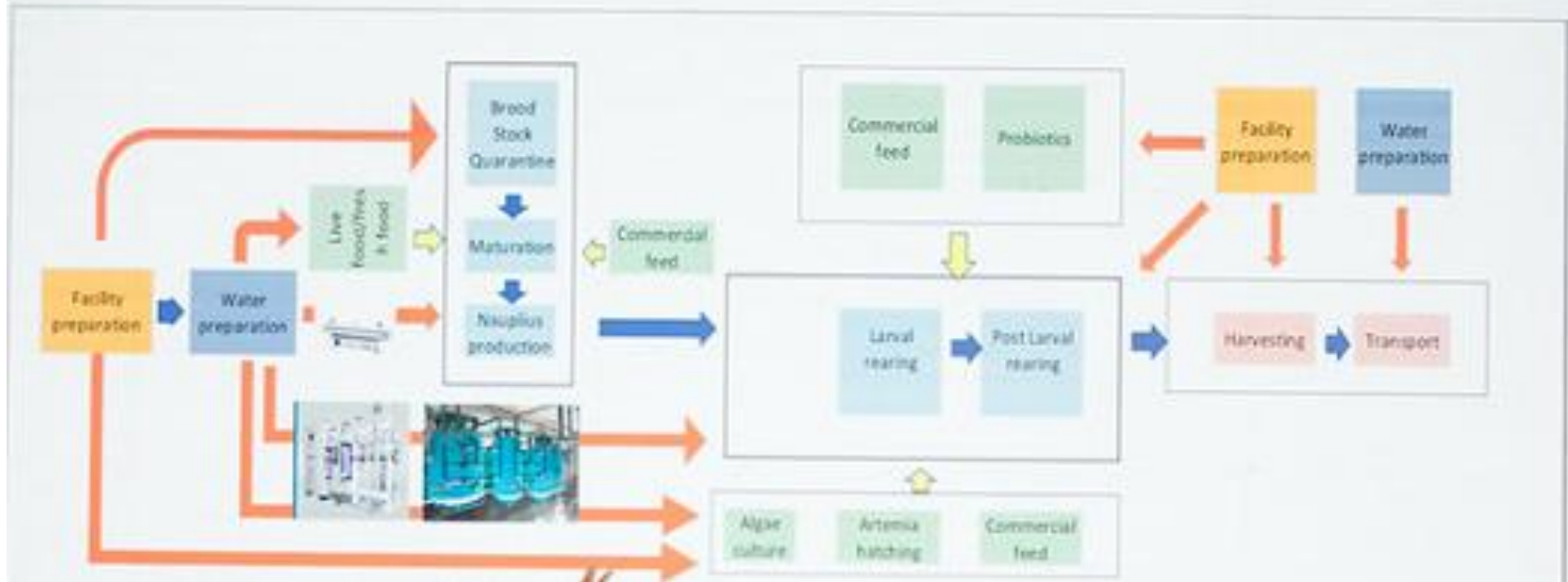
Consequence assessment: The process of describing the relationship between specified exposures to a biological agent and the consequences of those exposures. A causal process must exist by which exposures produce adverse health or environmental consequences, which may in turn lead to socio-economic consequences. The consequence assessment describes the consequences of a given exposure and estimates the probability of their occurring

# Risk estimation

Risk estimation: The process of integrating the results from the entry assessment, exposure assessment, and consequence assessment to produce overall measures of risks associated with the hazards identified at the outset

# Flowchart

Schematic diagram of systematic shrimp hatchery operation



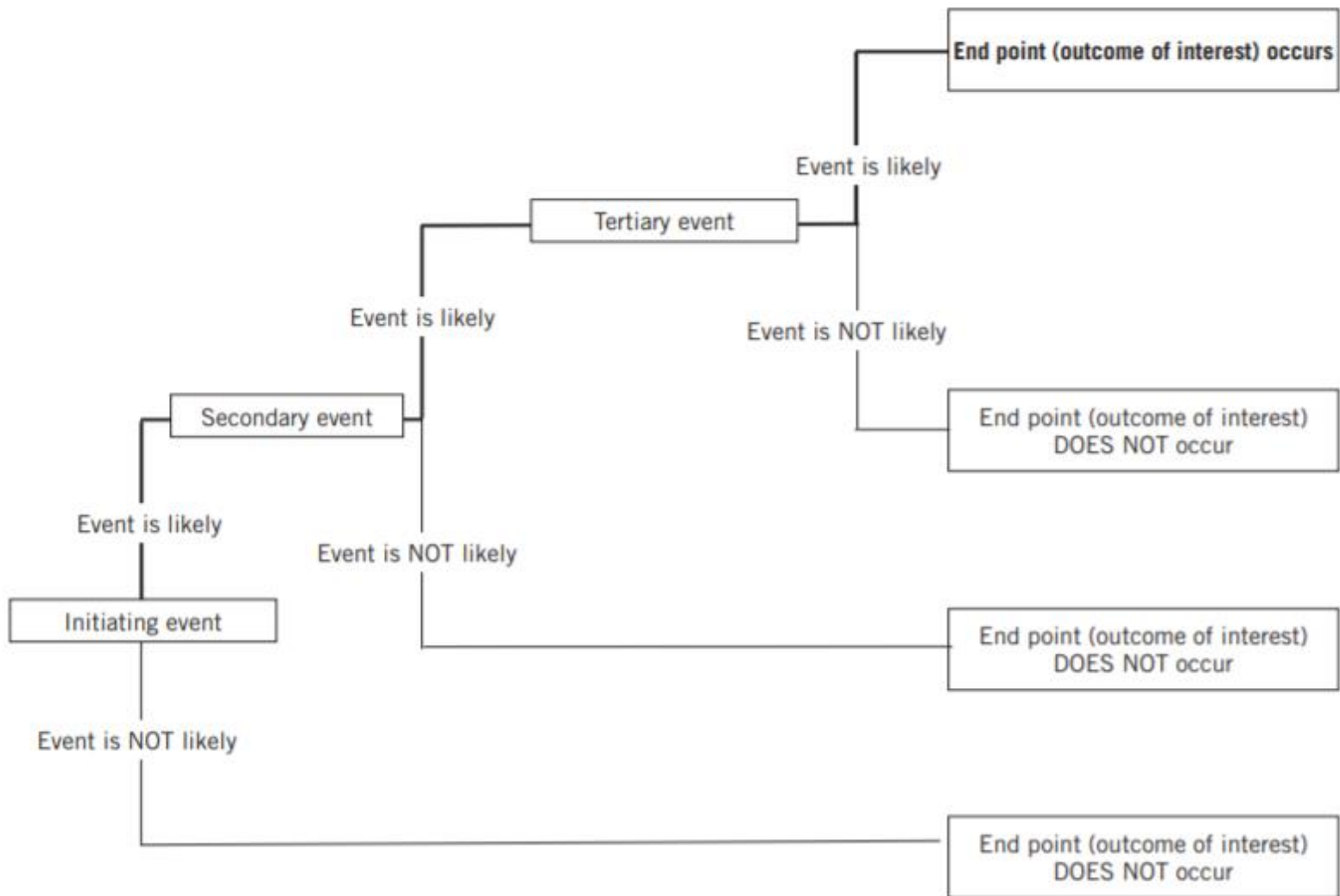
# Scenario tree

## 3.7.2. Draw a scenario tree for each hazard

### *Summary*

Prior to embarking on the risk assessment itself, it can be helpful to draw a scenario tree for each hazard under consideration to facilitate the identification of the various biological (risk) pathways leading to:

- the commodity harbouring the hazard when imported
- susceptible animals and/or humans being exposed
- potential outbreak scenarios.



**Figure 6** Generalised framework for a scenario tree where probabilities are examined