



# Results Chains: A Tool for Measuring Effectiveness and Attributing Change to Conservation Programs



**Environmental Evaluators Forum  
Washington D.C.  
June 12, 2008**

# This Presentation

1. Background on the Use of Evaluation & Adaptive Management in the Field of Biodiversity Conservation
2. What Is a Results Chain
3. How to Develop Results Chains
4. How to Use Results Chains as a Framework for Attributing Change to Conservation Programs
5. Build Example Chains

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# Common Questions

- Are we achieving an impact?
- Are we doing the right things?
- Are we doing them well?



# To Achieve Success, We Need To:

- Develop sound “theories of change”
- Measure the results of and improve effectiveness of actions
- Assess impact on ecosystems and species
- Convince managers, donors, and supporters that results are credible

# How Can We Help Practitioners Meet These Challenges?

Adaptive  
Management

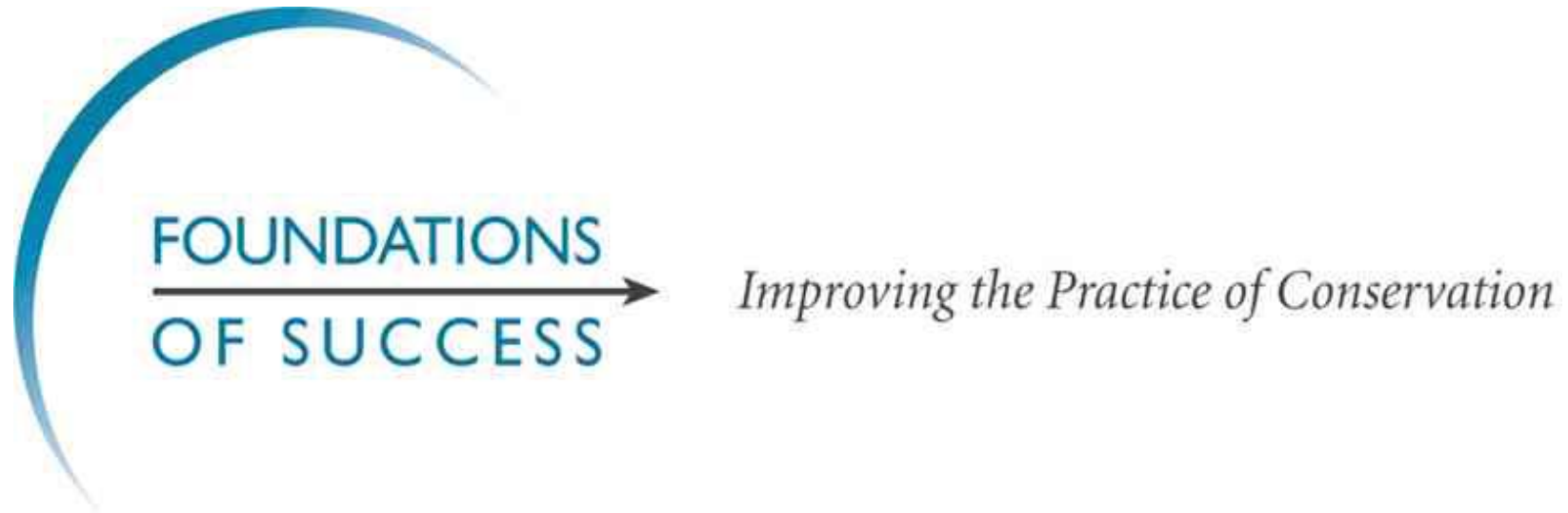
# What is Adaptive Management?

The integration of design, management, and monitoring to provide a framework for:

- Testing assumptions
- Adaptation
- Learning

# Foundations of Success

## Our Mission



To improve the practice of conservation through *adaptive management* – working with practitioners to systematically test assumptions, adapt, and learn.



# The Conservation Measures Partnership: Leading Conservation Organizations

## Core Members:



## Collaborating Members:



## Funding Support:



THE WILLIAM AND FLORA HEWLETT FOUNDATION



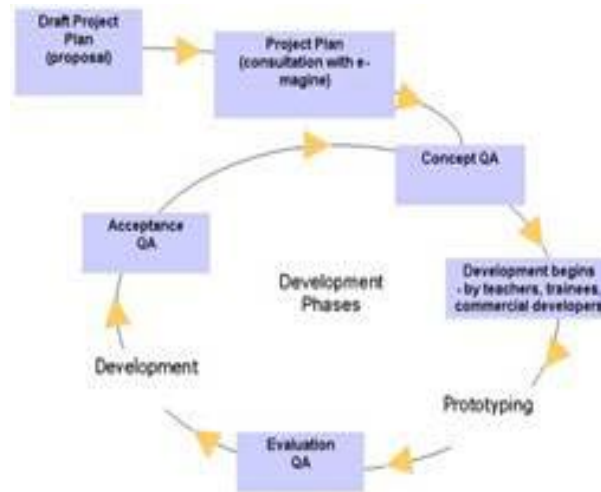
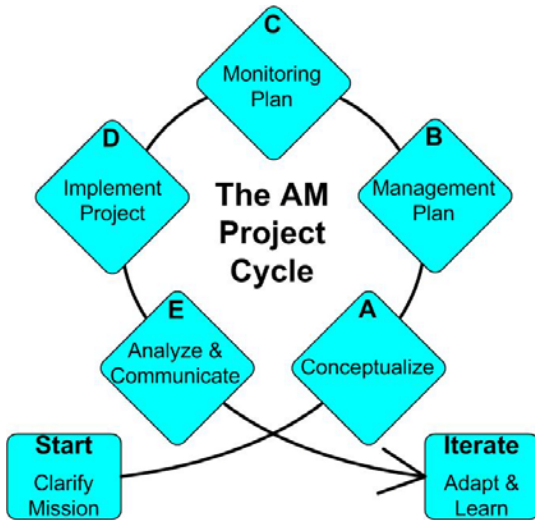
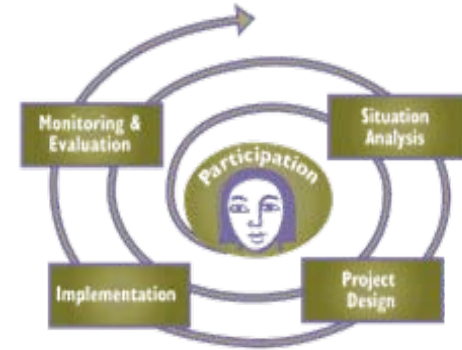
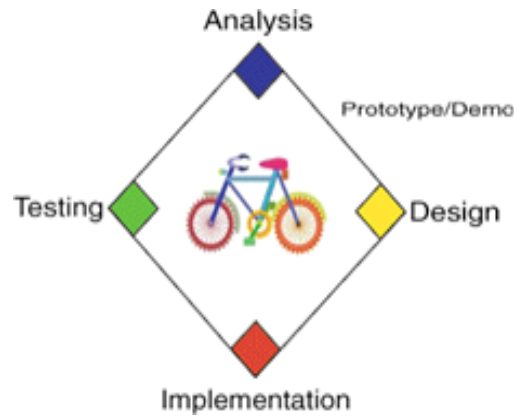
# The CMP Open Standards for the Practice of Conservation

www.ConservationMeasures.org

The image shows a screenshot of the Conservation Measures Partnership (CMP) website. The website has a green header with the CMP logo and the text "The Conservation Measures Partnership". A navigation menu on the left includes links for Home, About CMP, News, Initiatives, Products, Contact Us, Search CMP, and Members. The main content area features a "Welcome to CMP" section with a paragraph describing the partnership's mission. To the right, there is a "What's New at CMP" section with a link to "Rosetta Stone of Project Management Systems". Overlaid on the website is a document titled "Open Standards for the Practice of Conservation", dated 29 June 2004, Version 1.0, drafted by The Conservation Measures Partnership. The document cover features a circular diagram with the words "Analyze", "Evaluate", "Monitor", and "Communicate" around a central point.

CMPinfo@ConservationMeasures.org

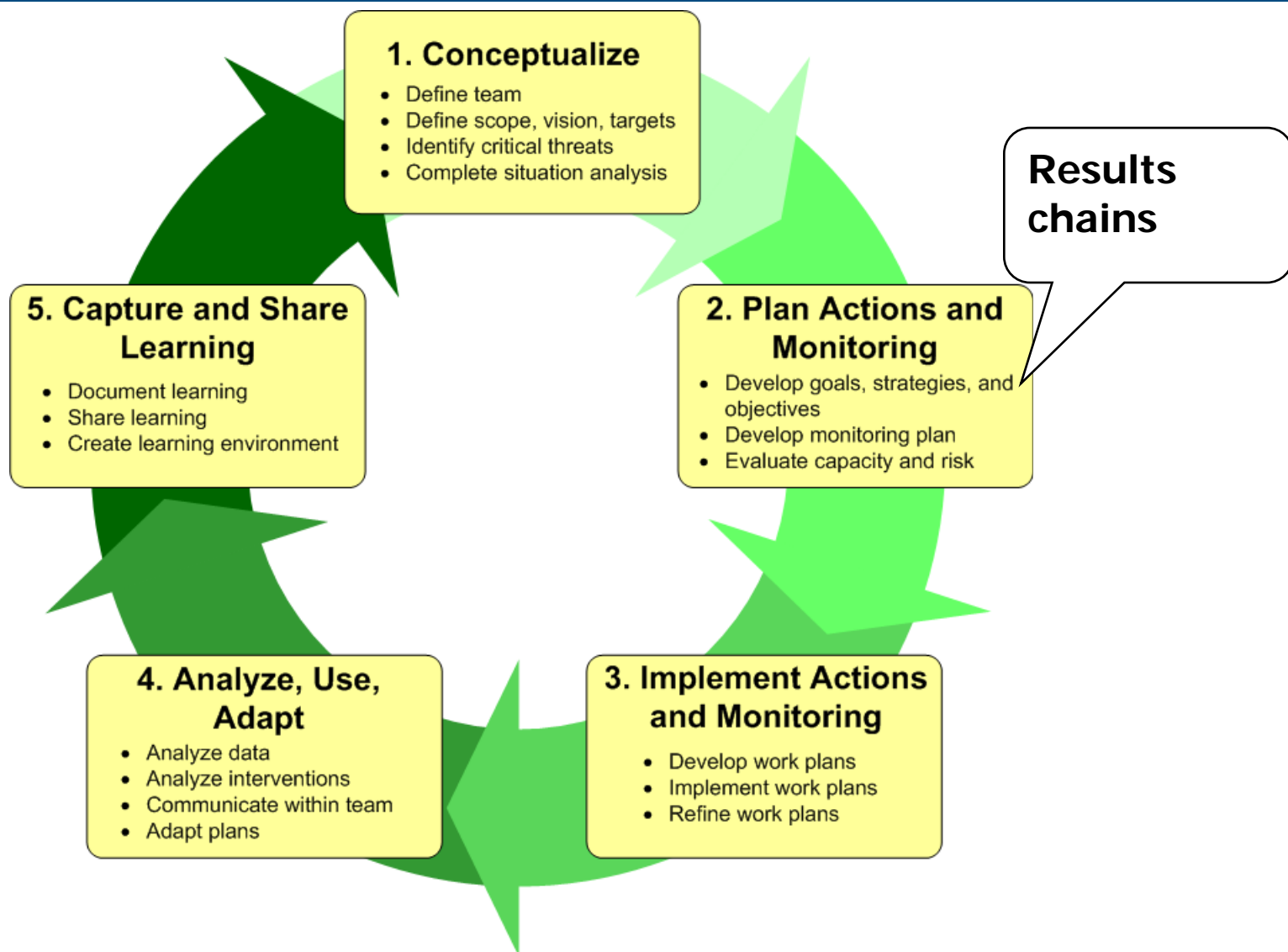
# Many Versions of Adaptive Management in Practice



# CMP Open Standards



# Results Chains – A Tool for Implementing the CMP Open Standards



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# What is a Results Chain?

A tool that clarifies assumptions about how conservation strategies contribute to reducing threats and achieving the conservation of targets

# What is a Results Chain?

## The Basic Components of a Results Chain:



Strategy



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Strategy



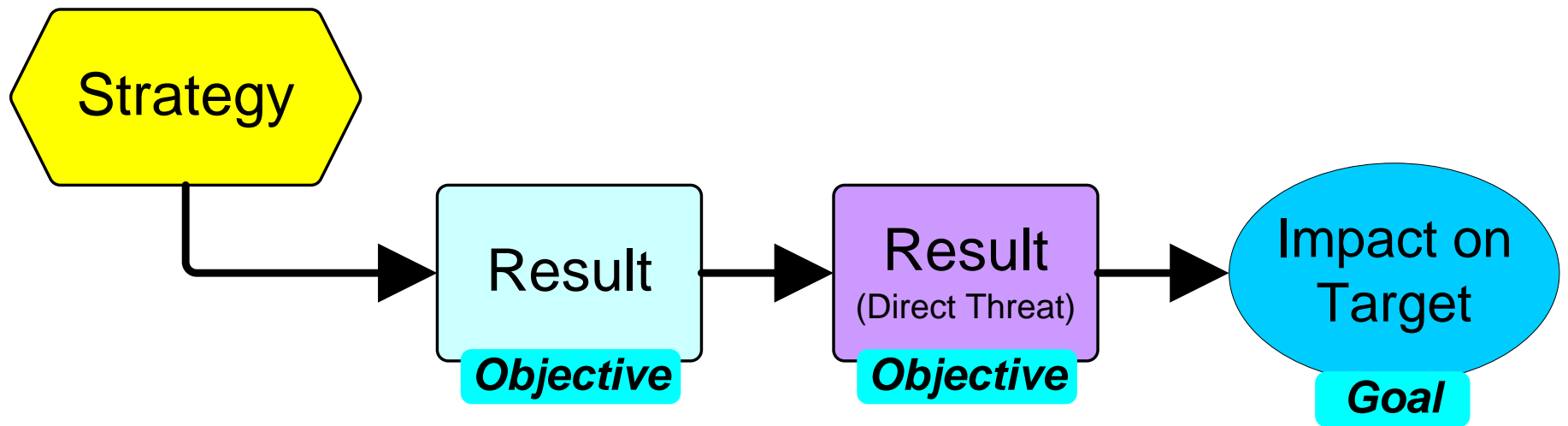
Impact on  
Target



***Goal***

# What is a Results Chain?

## The Basic Components of a Results Chain:

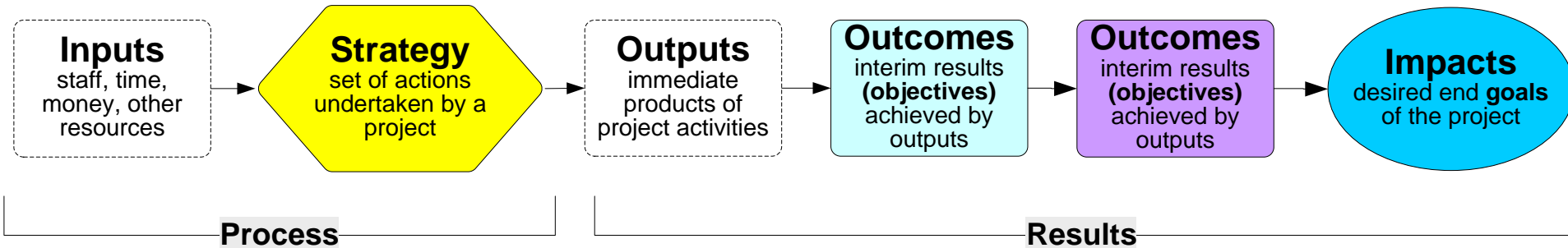


# Results Chain Terminology

## Logic Model

Inputs	Activities	Outputs	Outcomes	Impacts

## Results Chain



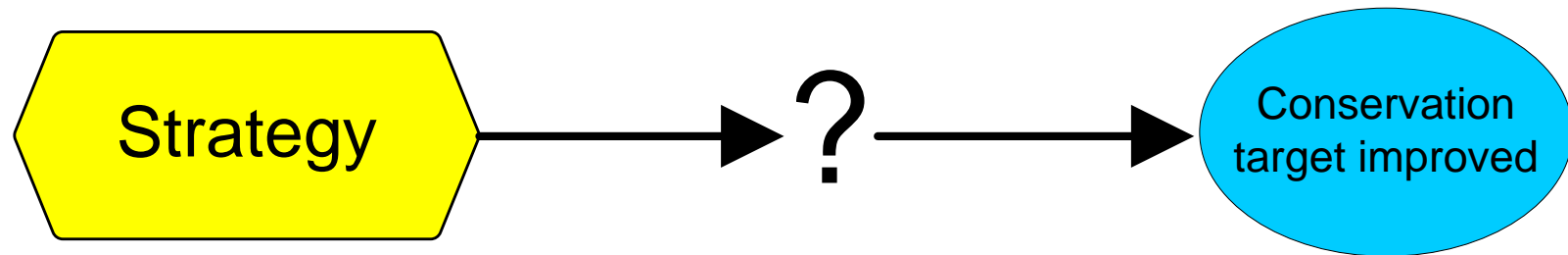
# What is a Results Chain?

A diagram of a series of “if...then” causal statements that:

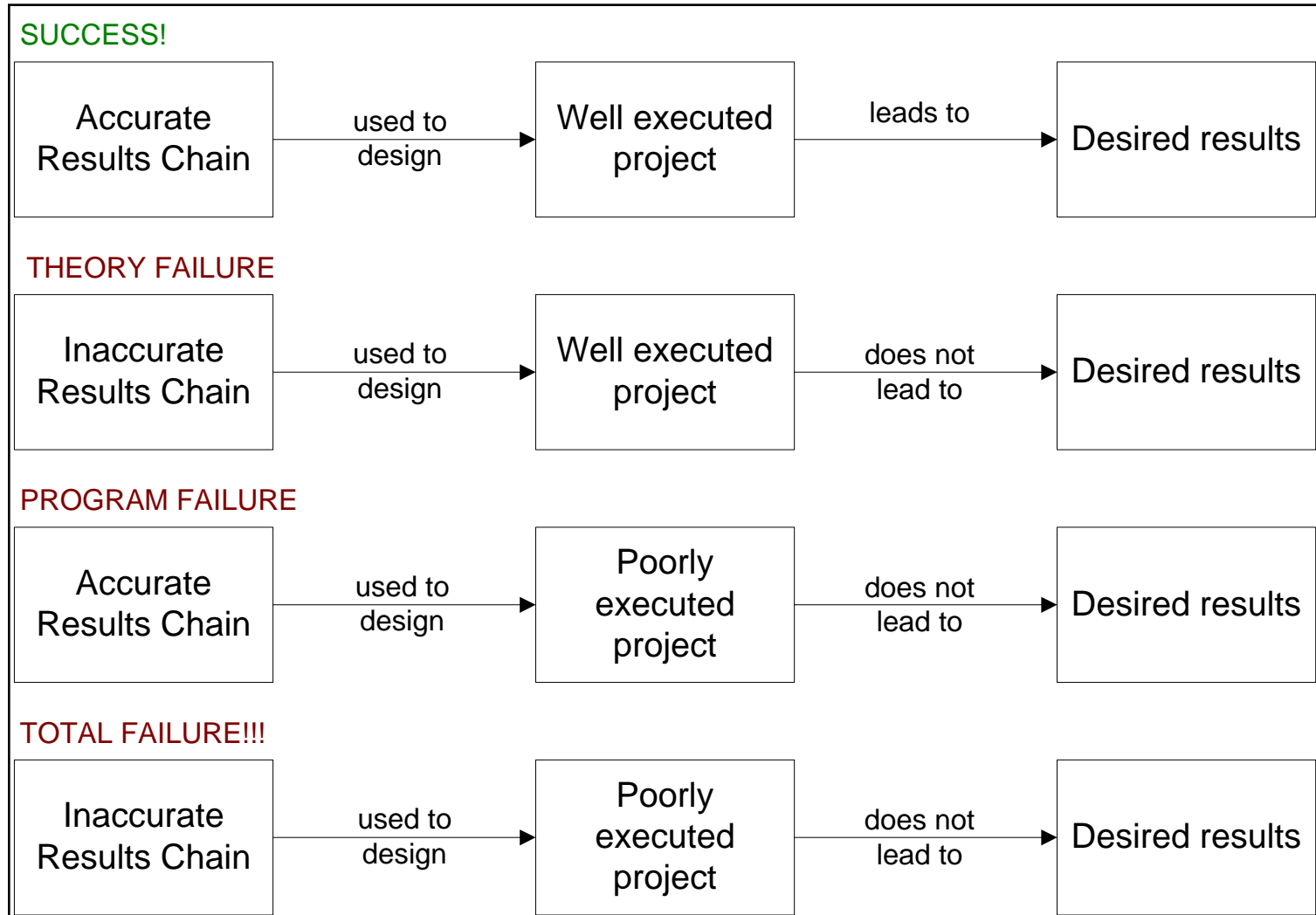
- Defines how a project team *thinks* a strategy will contribute to reducing a threat and conserving a target
- Focuses on the achievement of results – not the implementation of activities
- Is composed of assumptions that can be tested

# Results Chains

Implicit Assumptions:



# Achieving Success



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# How to Develop a Results Chain

1. Construct an initial results chain
2. Complete the links in the results chain
3. Verify that your results chain meets criteria of a good results chain

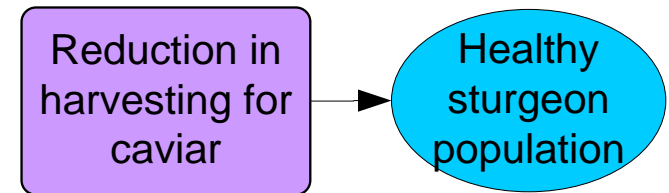


# 1. Construct an Initial Results Chain



Healthy  
sturgeon  
population

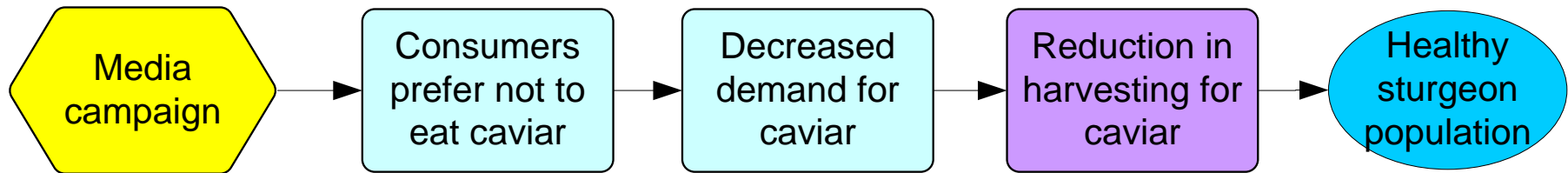
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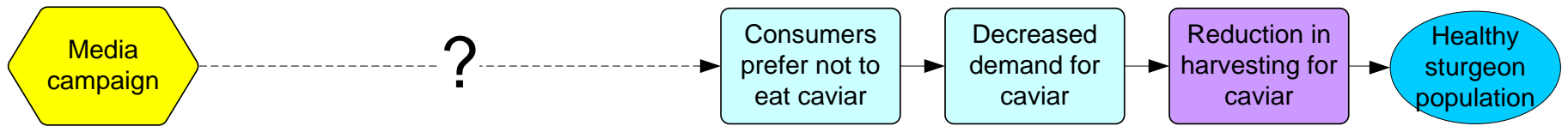
# 1. Construct an Initial Results Chain



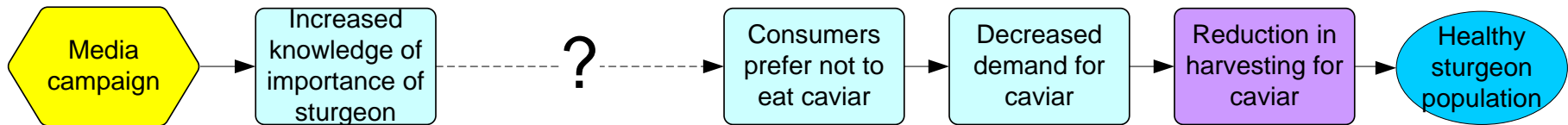
# 1. Construct an Initial Results Chain



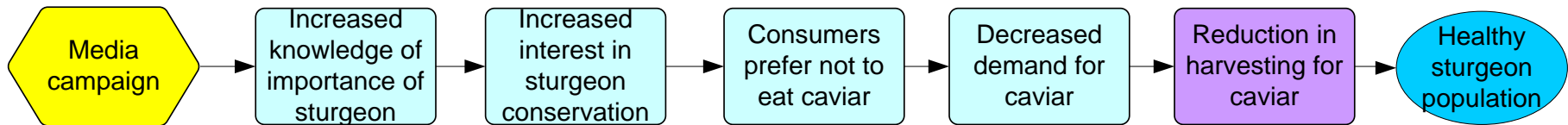
## 2. Complete the Links in the Results Chain



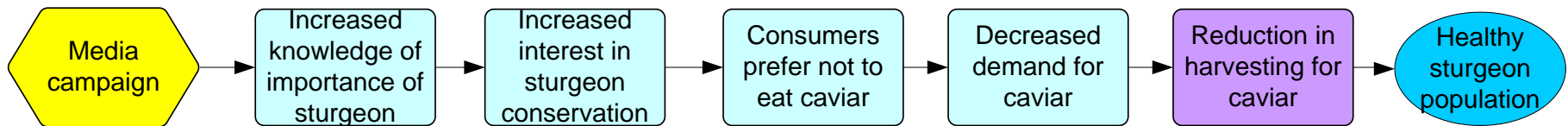
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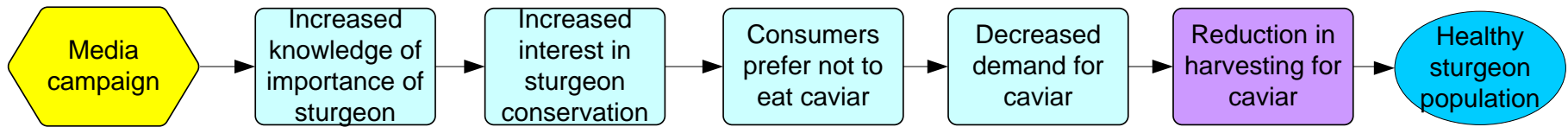
# 3. Review the Criteria for Good Results Chains



- **Results oriented:** Boxes contain desired results (e.g., reduction of hunting), and not activities (e.g., conduct a study).
- **Connected in a “causal” manner:** There are clear connections of “if...then” between each pair of successive boxes.

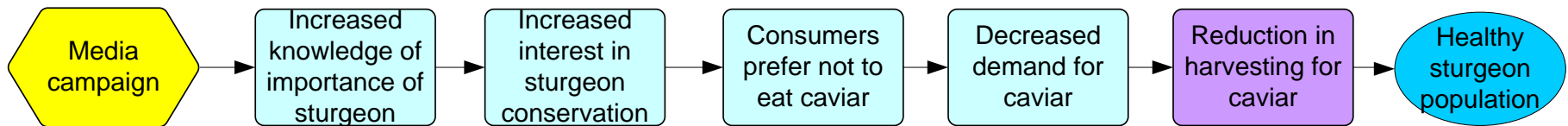


# 3. Review the Criteria for Good Results Chains



- **Demonstrates changes:** Each box describes how you hope the relevant factor will change (e.g., improve, increase, or decrease).

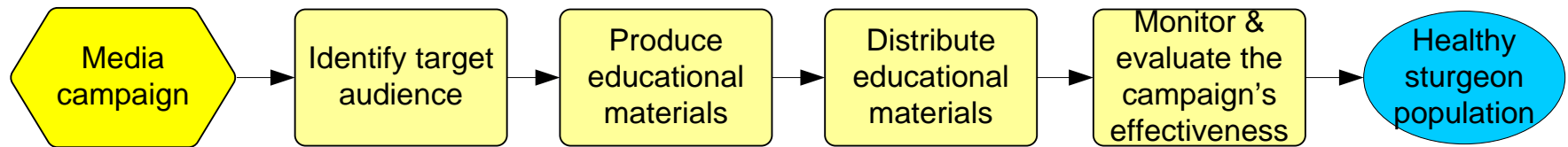
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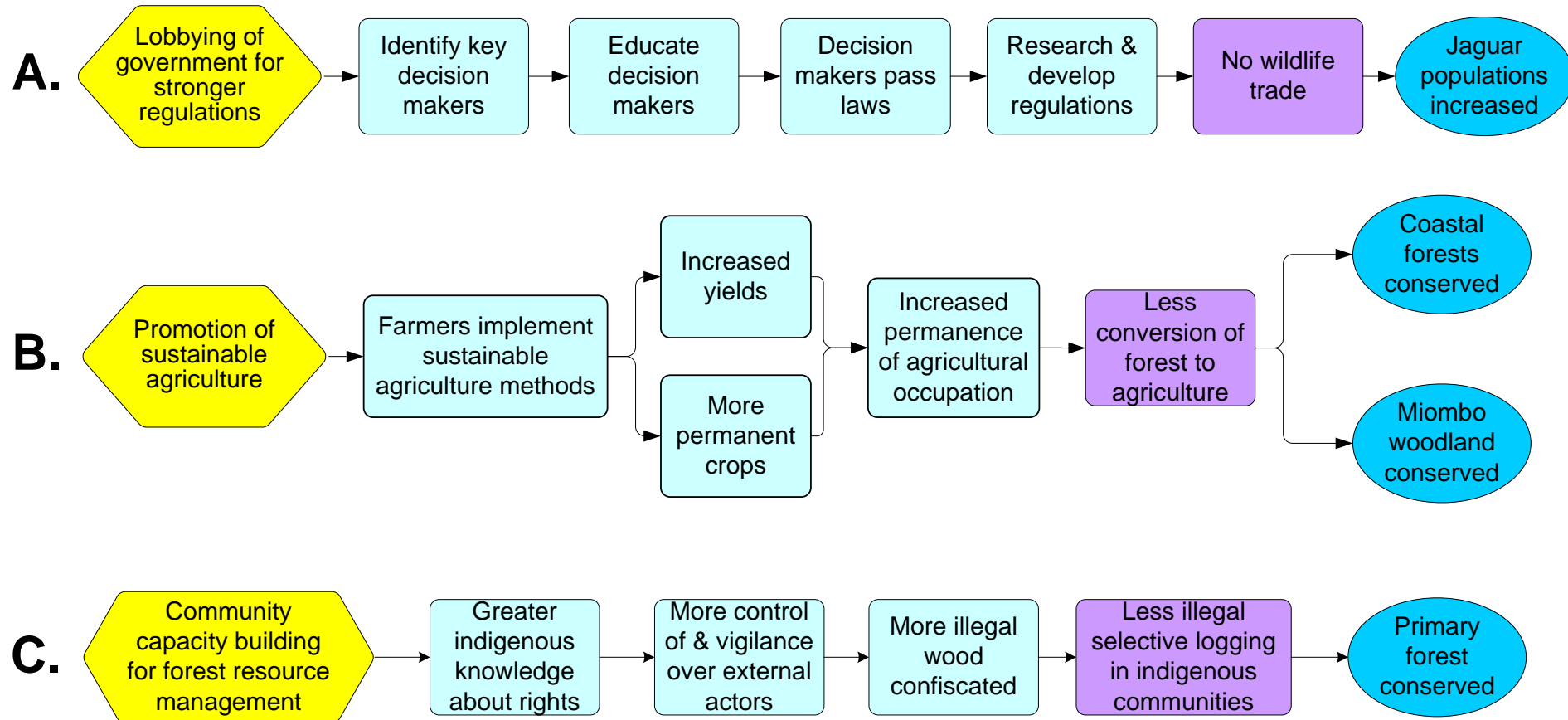
- **Relatively complete:** There are sufficient boxes to construct logical connections but not so many that the chain becomes overly complex.
- **Simple:** There is only one result per box.

# What is NOT a Results Chain?

It is not an implementation flow diagram...



# Your Turn: Which of the Following is NOT a Results Chain?



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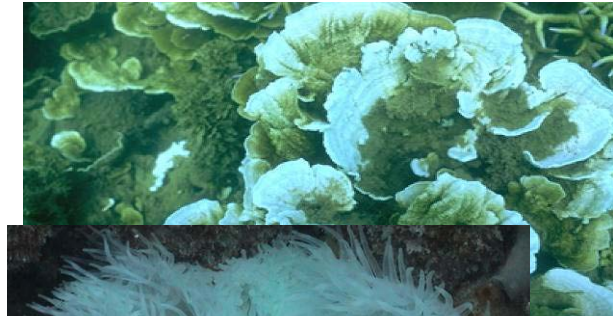
# Steps to Attributing Change to Programs

1. Define the Program's "Theory of Change"
2. Develop Key Results into Good Objectives
3. Define Indicators for Objectives and Goals
4. Measure Indicators
5. Define What Results are Directly vs. Indirectly Attributable to Program

# Example from the Meso-American Reef



# 1. Define the Program's Theory of Change



Less agrochemical contamination in marine waters & organisms

Coral reefs

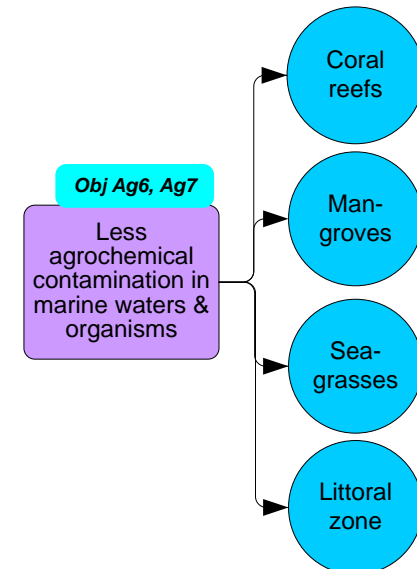
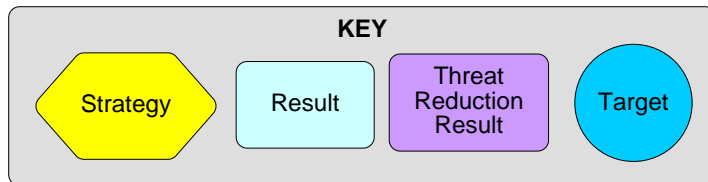
Man-groves

Sea-grasses

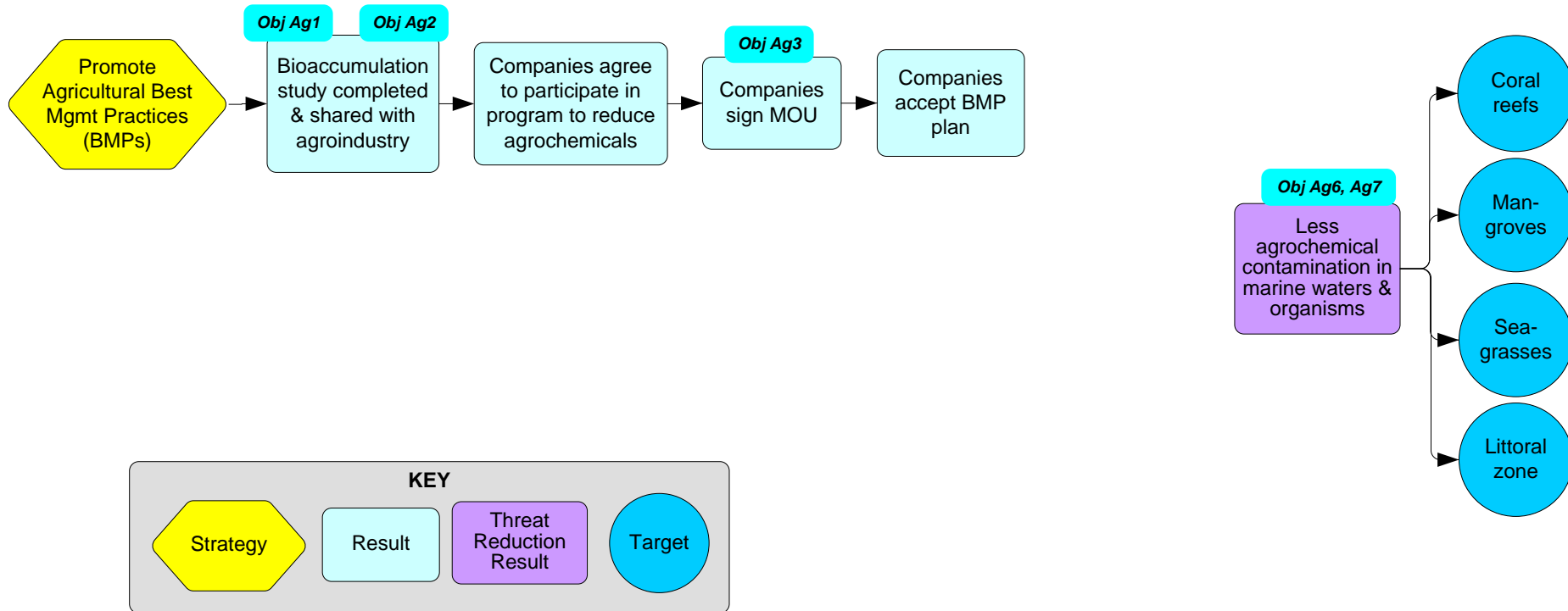
Littoral zone



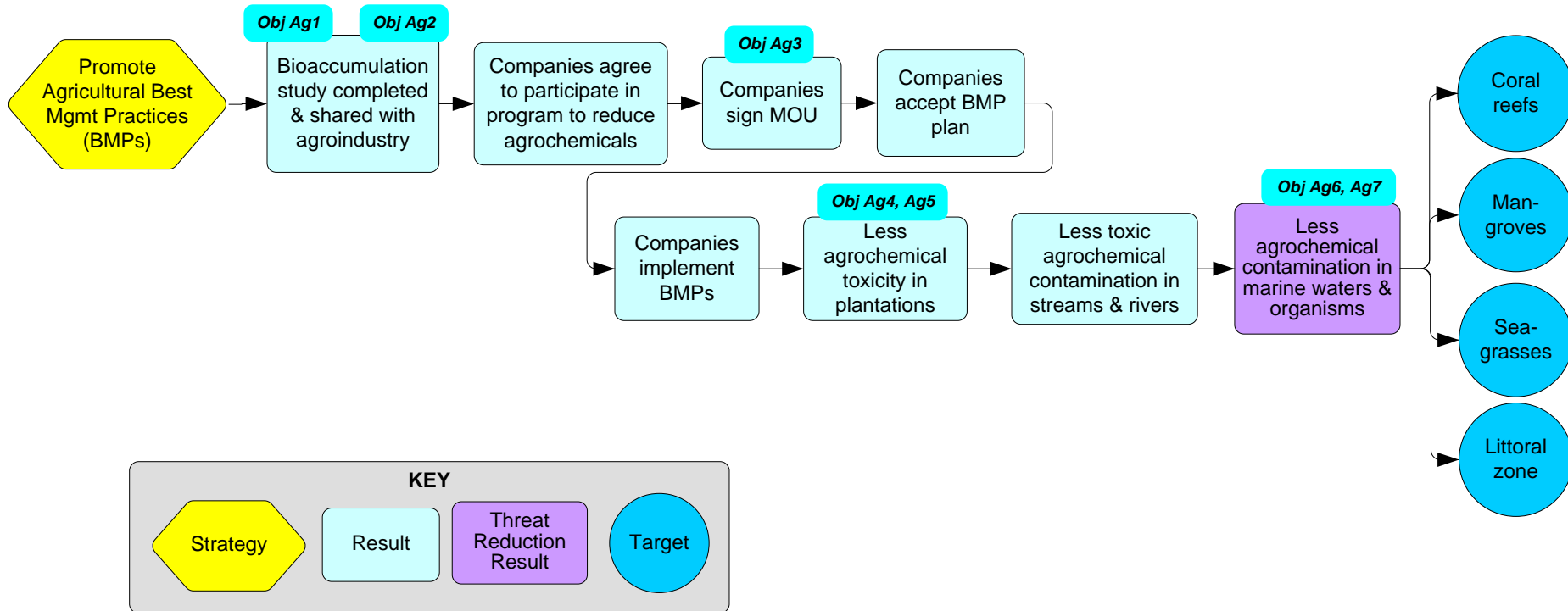
# 1. Define the Program's Theory of Change



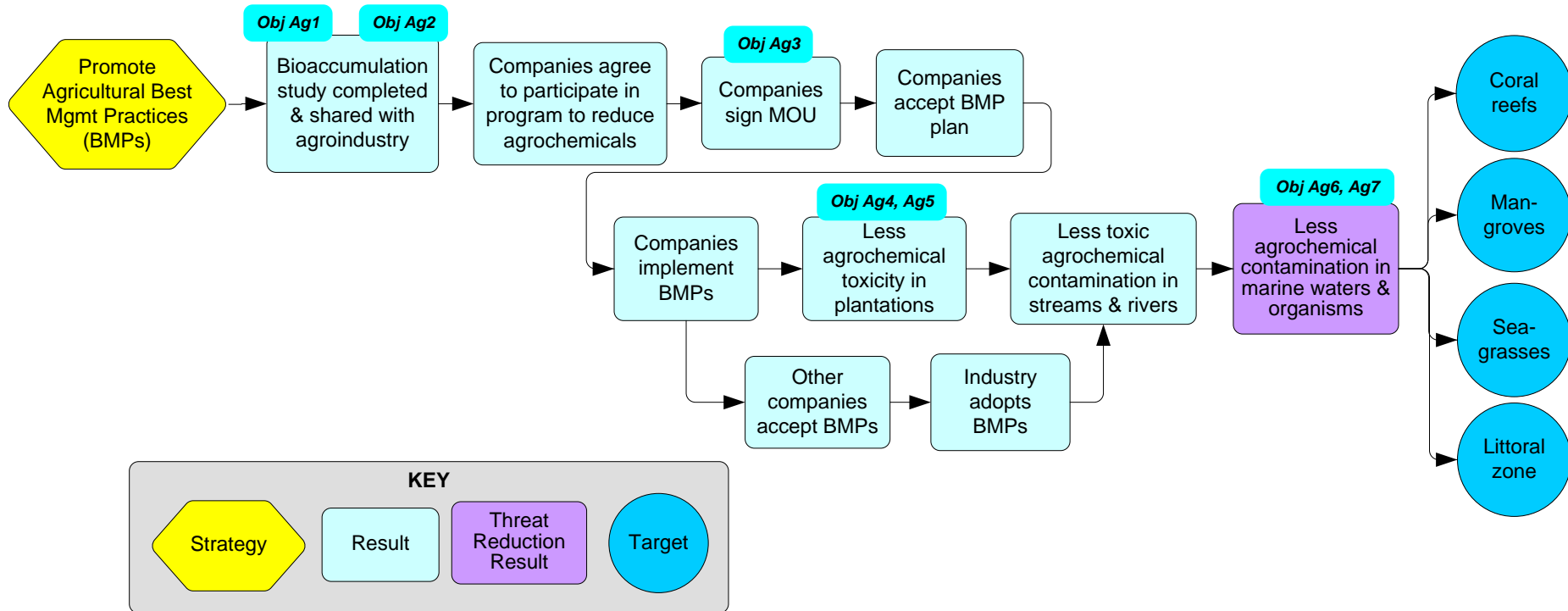
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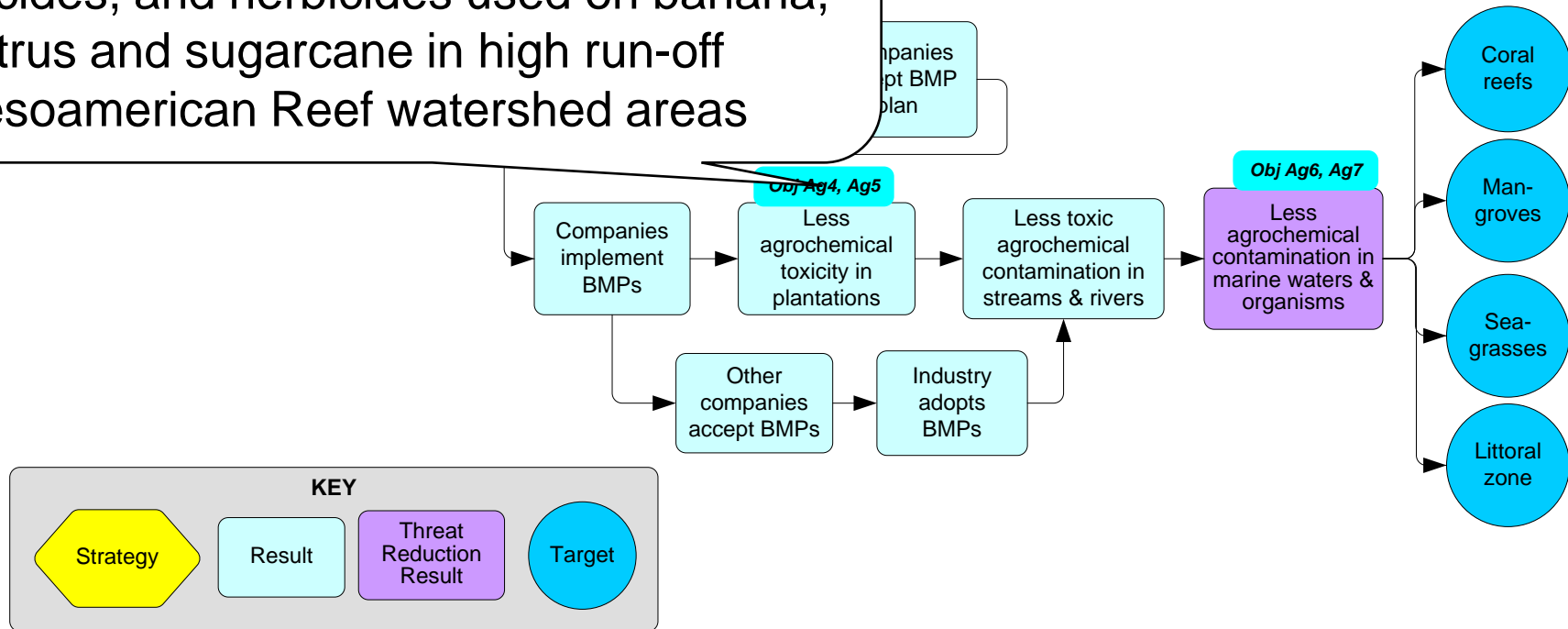


# 1. Define the Program's Theory of Change



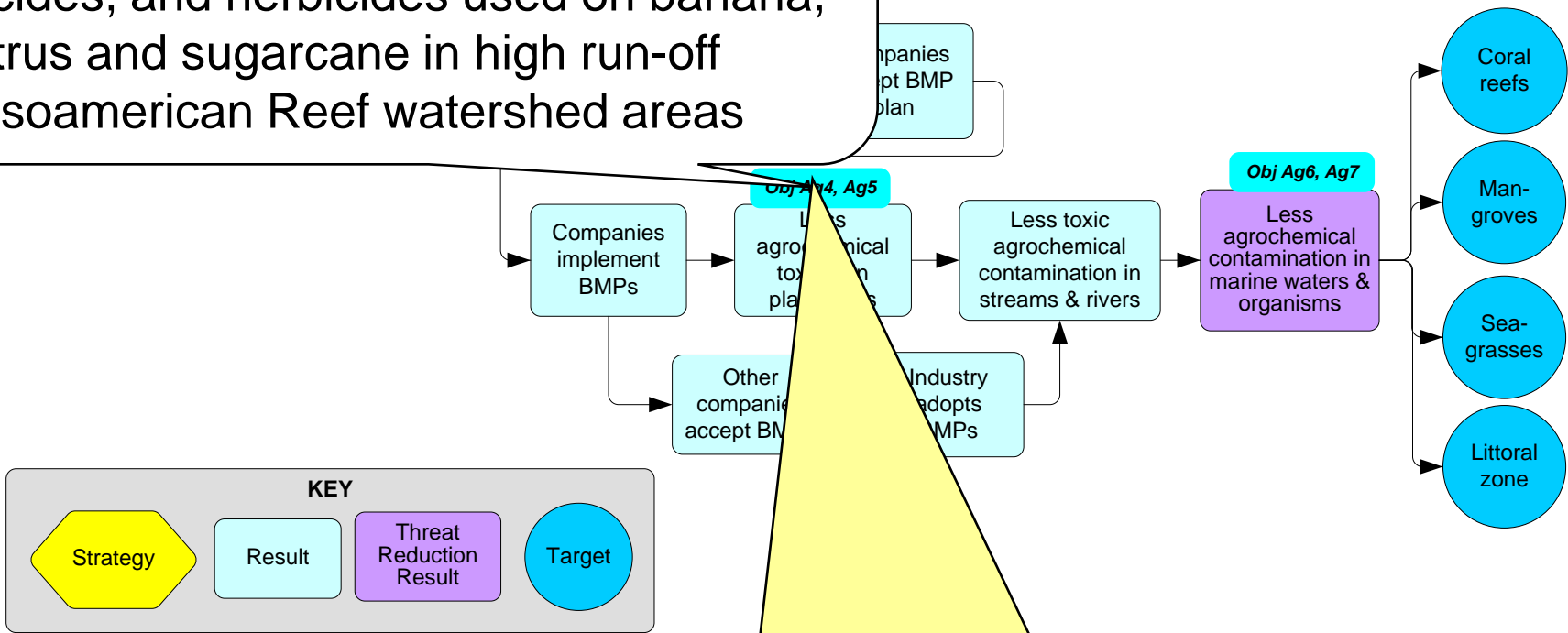
# 2. Develop Key Results Into Good Objectives

Ag5: By the end of 2012, reduce by 40% the total pesticide toxicity from fungicides, insecticides, and herbicides used on banana, citrus and sugarcane in high run-off Mesoamerican Reef watershed areas



# 3. Define Indicators for Objectives and Goals

Ag5: By the end of 2012, reduce by 40% the total pesticide toxicity from fungicides, insecticides, and herbicides used on banana, citrus and sugarcane in high run-off Mesoamerican Reef watershed areas



**KEY**

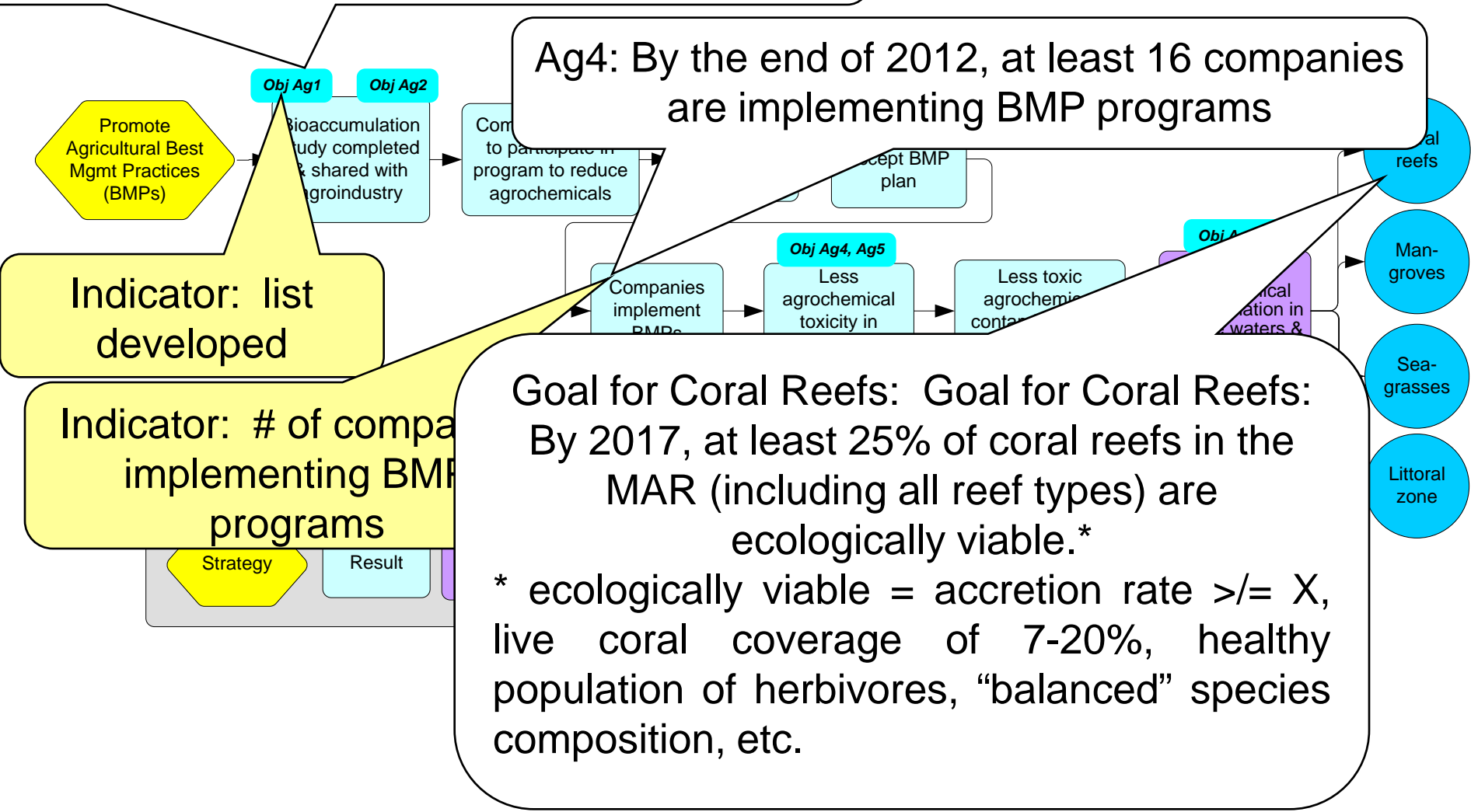
- Strategy (Yellow hexagon)
- Result (Light blue rectangle)
- Threat Reduction Result (Purple rectangle)
- Target (Blue circle)

Indicator: total pesticide toxicity from fungicides, insecticides, and herbicides used on banana, citrus and sugarcane

# Objectives and Goals

Ag1: By the end of 2008, develop a list of agrochemicals to reduce...

Ag4: By the end of 2012, at least 16 companies are implementing BMP programs



Indicator: list developed

Indicator: # of companies implementing BMP programs

Goal for Coral Reefs: Goal for Coral Reefs: By 2017, at least 25% of coral reefs in the MAR (including all reef types) are ecologically viable.\*

\* ecologically viable = accretion rate  $\geq X$ , live coral coverage of 7-20%, healthy population of herbivores, "balanced" species composition, etc.

- Coral reefs
- Mangroves
- Sea-grasses
- Littoral zone

## 4. Measure Indicators





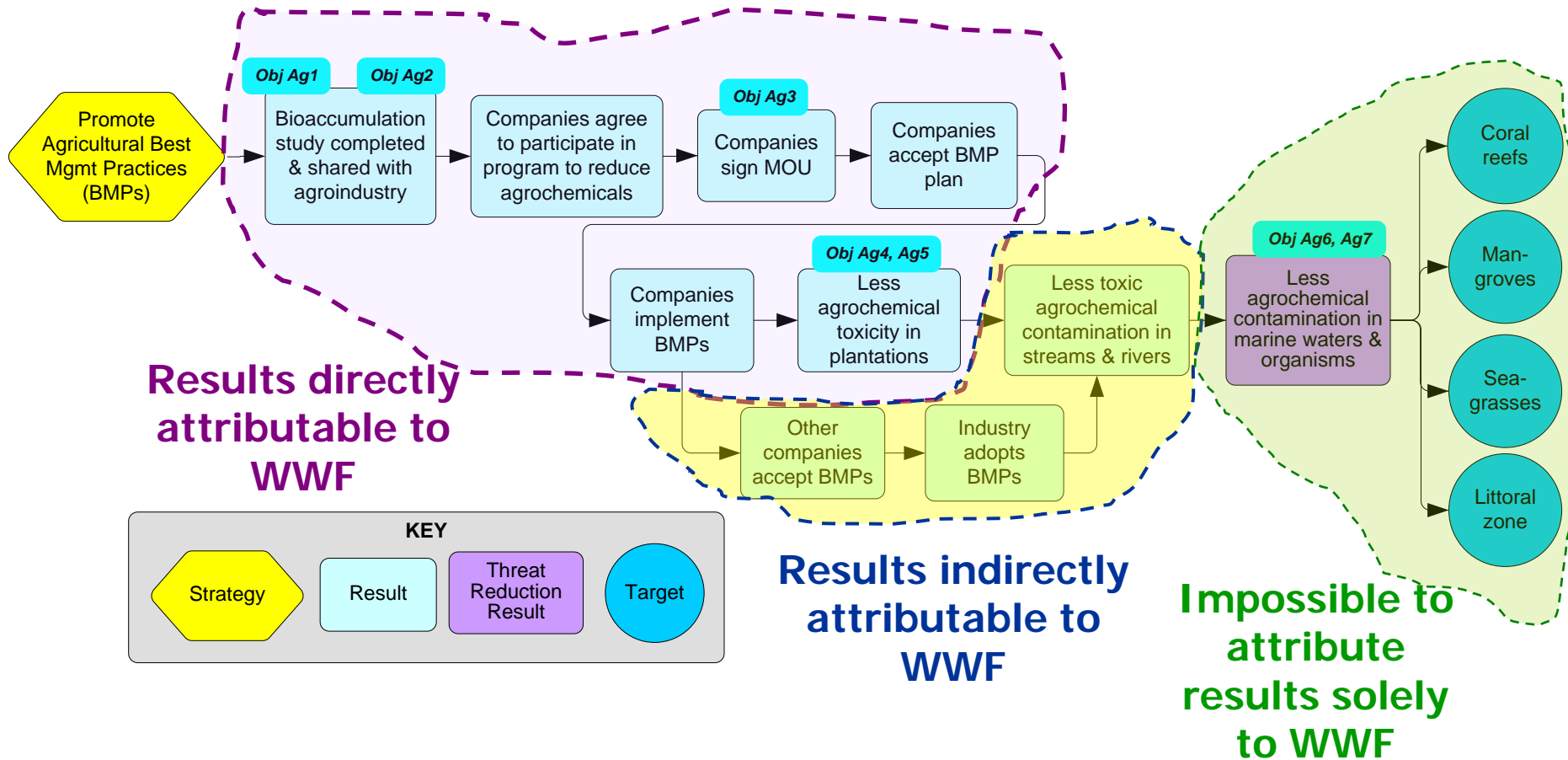
## 4. Measure Indicators

Indicator: total pesticide toxicity on banana plantations

Possible Monitoring Strategies:

- Pre-test / Post-test
- Time-series
- Comparison with strict control group
- Comparison with comparison group

# 5. Define What Results are Directly vs. Indirectly Attributable to Program



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