Logic Model and Impact Statements for NCRAC

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Why now?

- New requirement for all RACs in the next Request for Applications (RFA)
- Improve communications among all participants
- Increased need to identify impacts
- Communicate the effectiveness of the RAC programs to the public





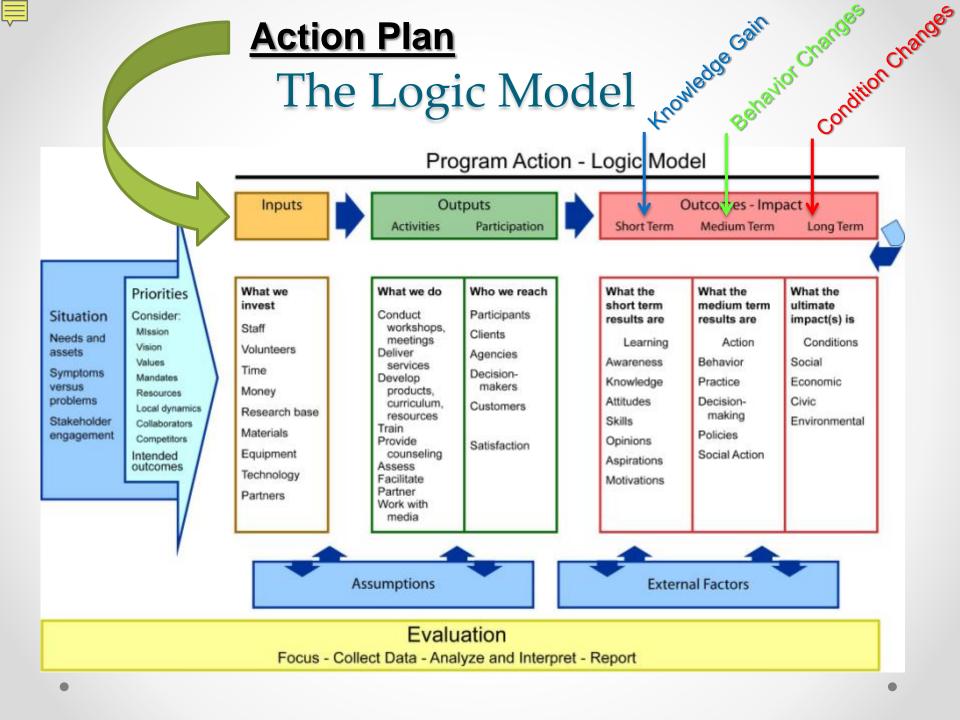
Where are you going?
How will you get there?
What will tell you that
you've arrived?

A logic model is your program ROAD MAP



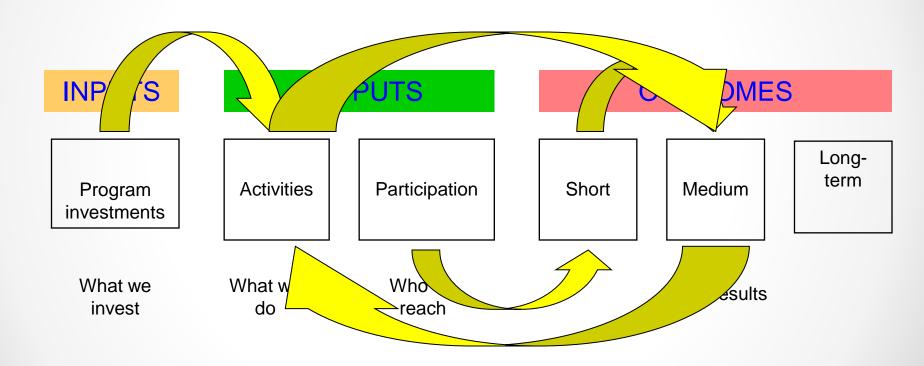
- Logic model is a...
 - Picture of your program or intervention
 - Graphic representation of the "theory of action" – what is invested, what is done, and what results
 - Core of planning and evaluation

Provides a common framework for your work



Programs aren't linear

Feedback loops and multi-dimensions



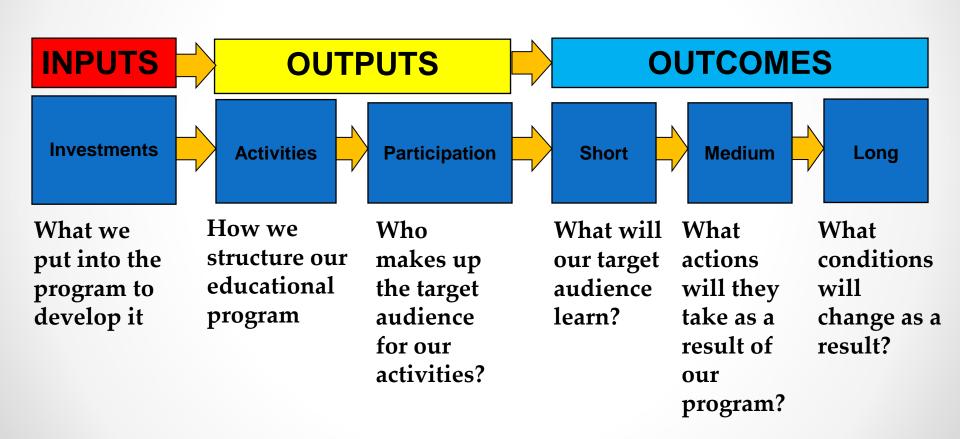
Constructing logic models

- Begin with the end in mind...
- Build them from right to left
 - That way even if you don't finish you have the information for impact statements for every project
- Build them for all your projects
- Build them before the project begins
 - o That way you get the data you need
- Re-evaluate over time



Summary View

THE DIFFERENCE IS IN THE OUTCOMES



Example Project:

Cost-effective, alternative protein diets for rainbow trout that support optimal growth, health and product quality

Source: Western Regional Aquaculture Center (WRAC)

Example

OBJECTIVES: Our long-term goals are to

- (1) Develop cost effective alternative ingredient diet formulations that support maximal growth, health and product quality
- (2) Increase utilization of alternative ingredients in trout feeds by educating feed manufacturers regarding amino acid availabilities and retention efficiencies of synthetic amino acids.

Example

Toward these ends, our 3-year goals are to

- (1) Identify commercially available alternate ingredient combinations that can meet the production needs of rainbow trout
- (2) Reduce interactive growth depressions when novel combinations of ingredients are utilized by refining amino acid balance.
- (3) Determine how formulations in fish grown to market size influence growth, fish health, product quality and consumer acceptance.
- (4) Meet stakeholders educational needs (which are?) through the development of an integrated outreach program including at least one WRAC Extension publication.

Given this information, we made a logic model...

Logic Model Example

Optimal Growth of Rainbow Trout Logic Model

Situation: Adapt Justification from proposal

Goal: Optimal growth, health and product quality in Rainbow Trout

Objective: Develop cost-effective, alternative protein diets

Logic Model					
Inputs	O Activities	utputs Deliverables	Knowledge Gain	Outcomes – Impact Behavior Change	Conditions
People Faculty Program staff County staff Partners Volunteers Working groups Resources Budgeted Grants Sales User fees Contracts Gifts Equipment Materials	Topics Part Networking Grov Partnering Exte Facilitating Age Planning part Grant writing Sma Business and finance Production staff Processing Trac Distribution lowa Marketing Food Safety Proc Education Nee Leadership development Organizational development		Knowledge Gain Fammers will increase knowledge of optimal diet & sustainability of rainbow trout production Extension staff will better understand how to? Agencies and private sector partners increase knowledge of? Small producers improve [specific] management skills	Increase number of producers who adopt an optimal diet for their rainbow trout. Increase usage of best management production practices and a more efficient production system. Business, institutions and individuals increase purchases of local foods. Increase processing and distribution of local food production.	Conditions Economically vibrant local communities. Diverse and growing food processing base. Enhanced quality of life for lowans by producing and consuming locally grown foods. Healthy individuals, families and communities.
Factsheets Curricula Websites Supplies Research Basic Applied On-farm Demonstrations Evaluation	Delivery Resource development Training Educating Face-to-Face Social media Websites Webinars Partnerships Print and other media eXtension Working groups Clubs and groups	Training modules and conferences Model business plans, decision tools, market tools, educational materials, websites Technical assistance in formulating optimal diets	Increase management knowledge, sustainability, communication, other? Producers increase leadership and organizational skills	Rainbow trout producers will form, grow and evolve their own leadership. State, counties and cities invest resources to enhance rainbow trout production and are able to attract new federal and private sector investments	

Future NCRAC Proposal Guidelines

Are the following Outreach elements included and clearly identified?

- Outreach Representative within the NCR identified and consulted in the preparation of the Full Proposal?
- For each Objective are the following identified:
 - o Target Audiences: Who will benefit from receiving project information
 - o Intended Learning Outcomes: What will be learned from this objective
 - Intended Management and/or Behavioral Outcomes
 - Procedures to Achieve Intended Outcomes
- Inputs: Who will do what and at what cost?
- Outputs: What products will be developed and at what cost?
- What publications, workshops, demonstrations, etc., will be developed?
- Evaluation Plan

The Importance of Impact Statements and How to Write Them

What's all the fuss?

- Cooperative Extension published a guide on how to write useful impact statements in 1971
- Fewer and fewer Americans involved in production agriculture
- This means that fewer and fewer legislators have constituents in production agriculture
- This means that public funding, both state and federal, for the land-grant system is harder and harder to come by

What do we want?

Clearly defined changes as a direct result of the research and extension projects funded

•For Example:

- Water saved
- Reduction in pollution / carbon footprint
- Human and ecosystem health benefits observed
- Dollars saved / increased profit
- o Jobs created, etc...

How do we get there?

Direct analysis and estimation of:

- Water usage given researched methods
- o Chemical composition of effluents
- Dollars and miles saved from locally sourced products to markets
- Comparison of BMPs used in research to conventional methods, and resulting changes
- Estimate increases in production, decreases in fixed and variable costs, and acceptance of new procedures
- Direct contact with fish farmers and monitoring aquaculture unit license changes through state natural resource agencies

Tools for Creating Impact Statements

- Surveys
 - o SurveyMonkey
- State aquaculture records
- Agriculture census
- USGS monitoring stations
 - o Effluents

Tools for Creating Impact Statements

- MarketMaker
 - o Change in suppliers and retailers
- Aquaculture community changes
 - o Feed suppliers
 - Aquaculture associations
 - o Fish processor

Many others exist depending on the data needed...

Make your message obvious

Be direct and clear

- Version 1: for professional colleagues
- Version 2: for traditional stakeholders
- Version 3: for decision makers and the general public

Poor Impact Statement

The outputs of this project are expected to provide enhanced pest and disease scouting protocols, more rapid diagnostic confirmation, and more timely pest management strategies for implementation by growers throughout the United States.

Decent impact statement

By improving ornamental irrigation efficiency by 50%, we can save more than 42 gallons of water per person for each of the 310 million people in the US each year. This will help conserve the nation's water resources.

Improved version

This project will save over 13 billion gallons of water per year or enough for the water needs of over a half million people for an entire year.

Effective Impact Statements

Provide <u>quantifiable</u> evidence of change or difference the program made—money, health, environment, jobs)

Give other evidence, e.g., trends, expectations, anecdotes, *logical inference*

Realistically project potential benefit for work in progress or work whose impact is more long term

Provide only enough detail to be easily understood

Highlight public benefits, outcomes, payoffs

An Impact statement is NOT

Numbers of people reached, meetings held, acres served—these provide context, but don't capture the element of change essential to a good impact

A list of grants, honors, recognition for organizers

A detailed description of the process or what's been done

A long, detailed report

Just more paperwork

Final Thoughts

Goal for these changes is to improve communications among all participants in the NCRAC community while also assuring future funding opportunities.

Credits

Used in part for this presentation -

- Ellen Taylor-Powel (University of Wisconsin Cooperative Extension) "Logic Models to Enhance Program Performance"
- Don Webster (University of Maryland Extension, Extension)
 "Outreach and Public Relations: The Difference is in the Outcome"
- USDA-NIFA "The Importance of Impact Statements and How to Write Them"