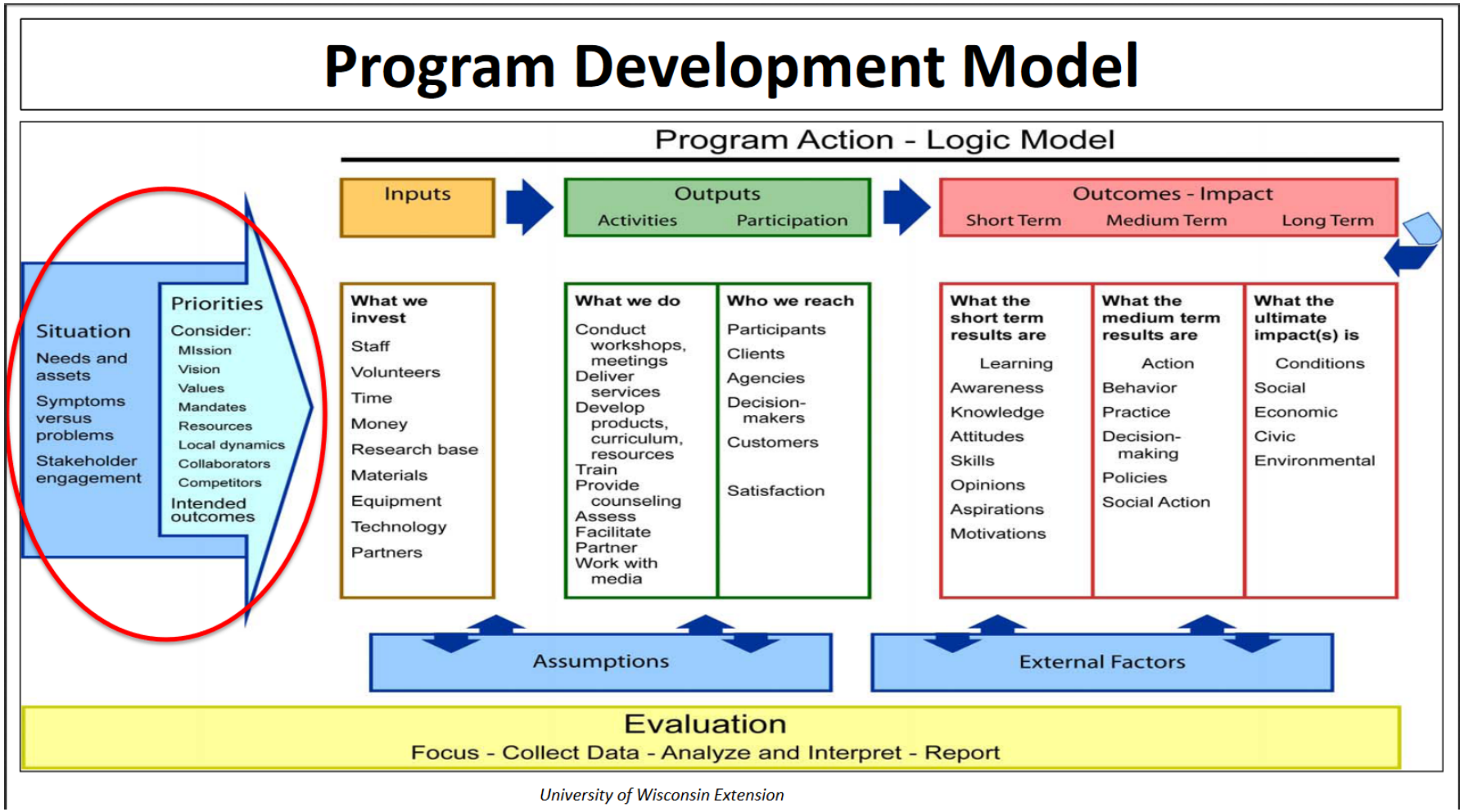
Logic Model

University of California
Agriculture and Natural Resources

The Logic model is a tool used for planning, implementation and evaluation. In this documents: 1) Model elements, 2) a blank template, and 3) an example model.



University of Wisconsin Extension

Logic Model

University of California
Agriculture and Natural Resources

Program Name: _____ Area: _____

Inputs	Outputs		Outcomes - Impact		
	Activities	Participation	Short	Medium	Long

Assumptions	External Factors

Reference: https://nifa.usda.gov/resource/logic-model-planning-process

Logic Model

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Program: Reducing environmental impact of livestock production – water quality (W. Powers, Specialist example) **Logic Model**

Situation: Livestock production provides an important protein source in human diets. Practices used in raising livestock can result in negative environmental consequences. My program aims to minimize negative environmental consequences as a result of providing animal protein sources thus providing a public value of protected natural resources and improved environment.

Inputs	Outputs		Outcomes – Impact		
	Activities	*Participation*	*Learning Change*	*Behavior Change*	*Condition Change*
Time Grant dollars State dollars Student assistance with research activities Advisor and Specialist assistance with Extension activities and development of decision aids	Conduct applied research confirming metric that a 1 percentage unit reduction in dietary crude protein translates to a 10 percent reduction in N excretion from various livestock species	Lab group	Improved understanding or how to formulate reduced crude protein diets without impacting livestock performance and the excretion benefits derived (not measured)	Adoption of reduced crude protein diets (measured by working directly with consulting nutritionists to obtain data related to portion of clientele feeding to metabolizable protein, number of synthetic amino acids in diet, etc)	Improved water quality (indicator is calculation of industry adoption rate and associated reduction in N excretion as supported by research activities)
	Educate those who make ration formulation decisions about the benefits of reducing diet crude protein and the performance implications – share research findings (meetings, scientific publications, trade articles)	Consulting nutritionists, Extension colleagues			
	Worked with livestock producers and grazers to improve manure handling and pasture management practices – adopt larger storage areas, minimize runoff from stacked manure/compost (demonstrations, field days, decision aid/tools for calculating manure production)	Livestock producers, grazers, design engineers	Increased knowledge about low-risk manure handling and storage practices and grazing practices to minimize P runoff (not measured)	Extent of adoption of new methods of manure production calculation (measured by working with DEQ to review design calculations in permit applications) Adoption of rotational grazing and riparian buffers (client survey)	Improved water quality (indicator is % change in manure storage time due to use of new tools; result is less risk of manure overflow from storage systems; reduced edge-of-field P loss as a result of riparian buffer and pasture management)
	Developed and delivered annual curricula to manure applicators (farmers and custom haulers) on best practices to reduce risk to water resources	Commercial and farm manure applicators	Increased knowledge as a result of taking the annual training (measure pass rate of training enrollees versus test takers that did not take training	Extent of change in practices to adopt principles taught in training session (measured in permit applications and renewals 2 yr post-training)	Improved water quality (indicator is annual change in number of manure spills and gallons spilled extrapolated to gallons of nutrients not reaching water ways)

Assumptions
Research findings were applicable across time and space; other influencing factors for improved outcomes were contributors in addition to my program efforts

External Factors
Legislation changed to enforce stricter manure handling requirements and associated compliance enforcement – contributed to improved outcomes, feed ingredient prices influence adoption of diet recommendations