

TARGETING OUTCOMES OF PROGRAMS HELP PUBLIC POLICY EDUCATORS DESIGN EVALUATIONS

S. Kay Rockwell, Robert J. Meduna, & Susan N. Williams

“Rural America faces many challenges. Some areas are experiencing significant growth, as suburban sprawl invades the countryside. Others continue to decline as young people leave and the remaining elderly population places large pressures on health and social services. Rural communities try to develop economic capacity in many different ways. Farming continues to dominate rural policy-making, yet rural America continues to diversify.” (CSREES/ECS, 2001)

Developing and sustaining rural prosperity is being addressed by social scientists whose research and policy analysis is focusing on non-metropolitan America. However, identifying program outcomes and documenting their achievement is complicated and hard to do. Programming models are needed that support programmers in achieving their main goal: to reduce social, economic, or environmental problems and document progress in doing so.

The purpose of this paper is to illustrate how a theoretical program model can be used to design an evaluation plan for a public policy Extension program. This starts to become a complex task as one integrates a program with a theoretical model. Therefore, the paper is divided into four distinct sections:

1. An abbreviated description of a public policy Extension program – *Land Use Strategies in Urbanizing Counties*
2. A brief description of a theoretical model – *Targeting outcomes of programs (TOP): A hierarchy for targeting outcomes and evaluating their achievement*. Available online: <http://deal.unl.edu/TOP/>
3. A dissection of *Land Use Strategies in Urbanizing Counties* according to *TOP*:
 - dissection of the goals and objectives
 - dissection of the desired outputs and outcomes
4. Using *TOP* to design an evaluation plan based on the desired outcomes

***Land Use Strategies in Urbanizing Counties* is an Example of a Public Policy Program**

Located fifteen miles west of Omaha, fifteen miles north of Lincoln and adjacent to Fremont to the south; Saunders County, Nebraska is experiencing growth pressure from these metropolitan communities as they advance towards the edges of the county and the eco-sensitive regions of the Platte River. What is at stake is the preservation of the natural resources of the Platte River and the agricultural lands and lifestyles of the residents of Saunders County. There is a great need for strategies and a set of models to be developed to guide and optimize the process of zoning land to ensure the productive co-existence of agriculture, housing, business, and industry. In some cases, agricultural properties are being developed without adequate consideration of the economical fiscal

impact of the development on the property taxes of the region and the impact on the area's agricultural industry. It is of the partnership team that the strategies used and the ideas developed during this project will have implications both throughout the state and nation (Saunders County, et al., July 2000).

Project partners. This project began in 1999 as a cooperative effort between Saunders County residents, University of Nebraska Cooperative Extension and the University of Nebraska Agricultural Research and Development Center, Saunders County Government, Nebraska Investment Finance Authority (NIFA) and the Joslyn Castle Institute for Sustainable Communities. Each partner brings different expertise and assets to this project.

Project goals. The success of the project depends on the knowledge and involvement of its citizens and on a decision making process that embraces different perspectives of public concern. Therefore, the goals include:

1. Providing community forums to increase the knowledge and involvement of the citizens in the decision-making process.
2. Recognizing the interconnectedness of environmental, economic, socio-cultural, and public policy in the planning process.
3. Establishing a long-term community vision and a continuous process of planning.
4. Describing the community's environmental, economic and social conditions, trends and assets.
5. Producing short- and long-term goals in these areas, implementing strategies for achieving the goals and establishing indicators to measure progress.
6. Developing a series of models to guide land use decisions.
7. Providing educational materials to share information developed in this study.

Six Step Process. A six-step process was identified to accomplish the goals. Phase one occurred from 1999-2001 and focused on the first three steps:

1. **Frame the Question** – A series of nine public meetings were held to identify the issues facing the county during the next 20 years. Five major categories were identified including: Natural Resources, People, Legal/Ownership, Growth and Zoning.
2. **Literature Review** – This process involved gathering GIS maps and putting them in a standardized scale. This information includes: topographic maps, soil survey maps, ground water, flood plain and depth to ground water. These maps reveal invaluable information and provide a profile of the components of the natural environmental landscape which can be used as a decision making tool.
3. **Public Information and Support** – A series of 14 public meetings were held to discuss the results of the framing meetings and review the environmental information. From those meetings the following issues emerged:
 - designation and protection of prime agriculture land
 - protection of the environmentally sensitive areas
 - growth around infrastructure nodes
 - conduct cost analysis of the direct impact of development
 - define appropriate areas for “high density living”

- identify and engage townships in the planning and prioritizing process
- future planning for infrastructure support

Phase 2 is starting in 2001. It focuses on educational strategies related to the issues and concepts of sustainable comprehensive planning. It will involve Saunders County residents and their elected and appointed officials. It will become a decision making process that embraces different perspectives of public concern and will focus on the following three steps:

4. **Best Practices Models** – From information gathered in steps 1-3, College of Architecture faculty will develop a web based tool, or identify a commercial tool, that provides GIS data layers and creates scenarios for future land use planning.
5. **Public Issues Educational Materials** – Print and web based materials will be developed that describe the issues and concepts related to sustainable comprehensive planning, trends and community assets.
6. **Educational Delivery and Community Feedback** – Elected and appointed officials will be taught how to use the web based models. Public forums that include both the elected and appointed officials, as well as the general public, will be conducted to (a) help people learn about the interconnectedness of the environmental, economic, and social-cultural issues that impact land use decisions, and (b) obtain community input for developing public policies about land use.

Desired Outcomes for Phase 2. As a result of phase 2, the project partners expect the following outputs and outcomes:

(Outputs)

- A web based tool that provides GIS data layers and creates scenarios for future land use planning.
- Print and web based materials that describe the issues and concepts related to sustainable comprehensive planning, trends and community assets.
- Public forums.

(Outcomes)

- Elected and appointed officials will use the web based GIS data layers model to create scenarios for future land use planning.
- Community residents will learn about environmental, economic, and social-cultural issues that impact land use as they will participate in a decision making process.
- Elected and appointed officials will use the models they develop, the educational materials developed, and the input from community residents to make decisions about future land use development that will protect or improve the environment, the economy, and the social culture.
- Other regions through out the U.S. will use this model along with the materials that have been developed for sustainable comprehensive land use planning in their region, and they will develop policies that will protect or improve the environment, the economy, and the social culture.

In order to improve the identified SEE condition(s), individuals and groups must use **practices** that help bring about modifications in the condition. Therefore, in program planning, you target the specific practice use that is necessary to achieve the targeted social, economic, and environmental condition(s).

Practices change as people increase their knowledge, modify their attitudes, improve their skills, and raise their aspirations, that is their **KASA (knowledge, attitude, skills, & aspirations)**, and then apply these KASA changes in their own living and working situations. In program development, you target the KASA required to achieve the changes that have been targeted.

Program participants change their KASA through participating in program activities. Therefore, in program development, you target the types of **reactions** needed to ensure sufficient **participation** in **activities** that promote the desired KASA. Finally, **resources** that support the implementation of the program activities are identified and acquired.

In program performance, designated **resources** are spent to conduct the targeted program **activities** and obtain the necessary **participation**. Participants' **reactions** affect the extent of their participation in the activities.

Positive reactions help program participants acquire the targeted **KASA**, that is, knowledge, attitudes, skills, and aspirations. The greater their interest and involvement in the activities, the more likely participants are to acquire the targeted KASA.

As participants apply KASA change in their working and living habits, they adopt the targeted **practices**. As participants use these practices, they help change the **SEE** condition which was targeted. These social, economic, and environmental outcomes affect both the program participants and the general public. SEE outcomes are placed highest in the "programming staircase" because they are the end results expected from the educational programming.

Like other models, the framework oversimplifies reality. However, simplification is necessary to provide a user friendly construct for viewing programming. The actual sequence of events in programming does not always proceed in accordance with the framework. For example, participants reactions may occur prior to and during activities. Also, practices may change before attitudes or knowledge change.

A strength of TOP is that it helps integrate educational program development and program evaluation; educators can use the same concepts in program development as they do in program evaluation. These concepts contribute as one designs and develops programs. And, these same concepts guide the evaluation of a program's performance.

A Dissection of *Land Use Strategies in Urbanizing Counties* According to TOP

Theoretical programming models are useful both in developing a program and designing an evaluation plan. Targeting Outcomes of Programs (TOP) is one model that focuses on outcomes in planning, implementing, and evaluating programs (Rockwell & Bennett, 2000). It is a hierarchy that integrates program evaluation within the program development process. TOP uses a simple framework to target specific outcomes in program development and then to assess the degree to which the outcome targets are reached.

The interrelationship between this theoretical programming model and its practical application can be illustrated by applying the model to an existing program. By dissecting the (a) goals and objectives and (b) desired outputs and outcomes of *Land Use Strategies in Urbanizing Counties* (Saunders County, et al., July 2000), one can understand the thought process used in developing the program and identify the specific outcomes on which an appropriate evaluation can be designed.

Dissection of the Program Goals

Figure 2 illustrates how the planning process for **Land Use Strategies in Urbanizing Counties** integrated needs assessment and program design on the left hand side of the TOP hierarchy. Optimizing the process of zoning land to ensure the co-existence of agricultural, housing, business and industry was the overarching SEE (social, economic, and environmental) condition identified as a high enough priority in which a program needed to be developed. Consequently, the first three steps in the 6-step programming process (i.e., framing the question, reviewing the literature, and gathering information and support from the public) assessed needs at the practices and KASA levels of the hierarchy. The process of gathering the information built support (i.e., built positive relationships at the reactions level) among the project partners (i.e., the participation level). Using the needs assessment, the project team then addressed the activities level. They need to develop a web-based tool, or use a commercial tool, to create scenarios for future land use planning and train elected and appointed officials on its use. They also need to develop educational materials on issues and concepts related to sustainable comprehensive planning. They also defined the educational strategies (i.e., public forums and media releases) to deliver the programming materials and obtain input from the general public. Resources were then identified and a grant proposal was written to obtain funding to carry out the second phase of the programming (Saunders County, et al., March 2000).

Program Development
(Assess needs/opportunities &
design program)

Land Use Strategies in Urbanizing Counties

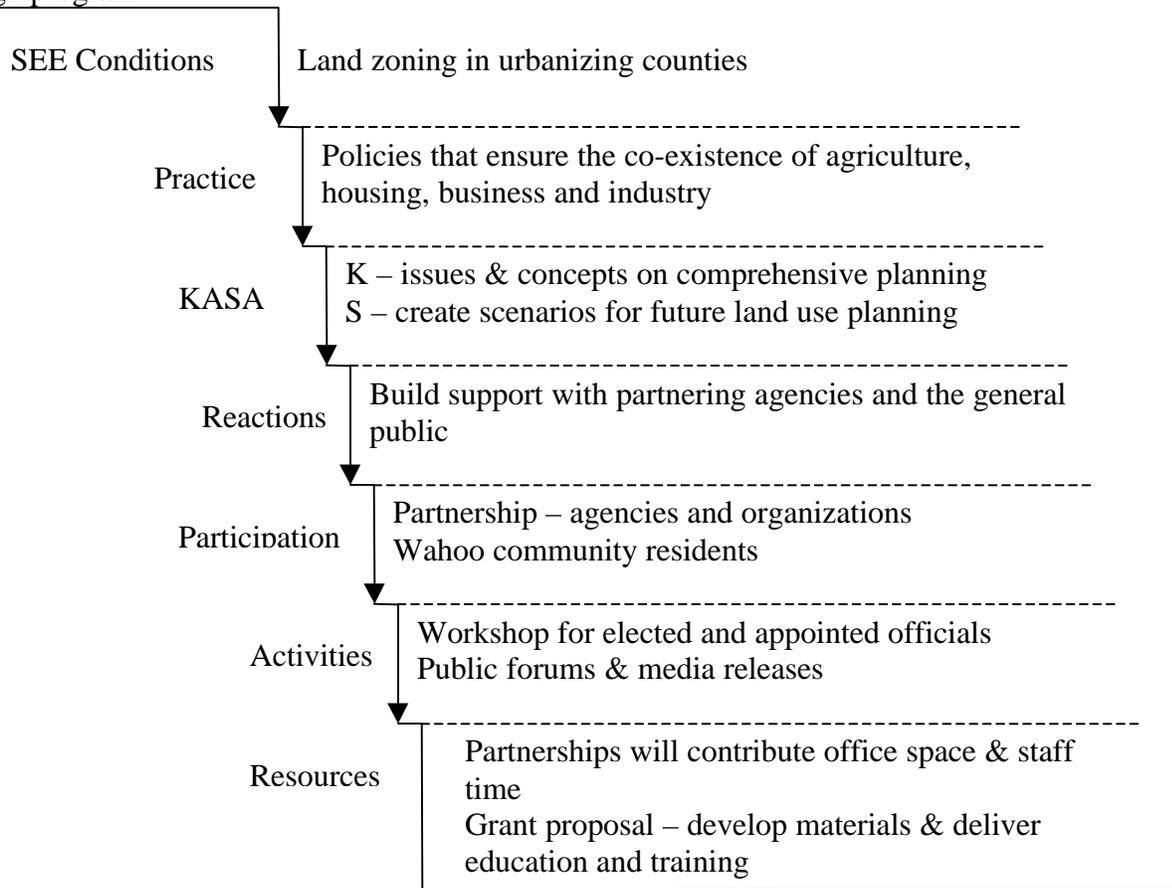


Figure 2. Interrelationship Between Theory and Practice Using TOP for Program Planning

Dissection of the Desired Outputs & Outcomes

The program team then defined the outcomes they would expect from the program on Land Use Strategies in Urbanizing Counties. Figure 3 illustrates that the long-term outcome at the **SEE** level will be using the land for agriculture, housing, business and industry in a manner that will enhance the environment and provide economic growth that strengthens the social fabric of the community.

However, let's start at the bottom of the hierarchy to illustrate the expected outputs and outcomes. At the **resources** level, additional funding and new partnerships must be obtained. Educational resources will be developed to support **knowledge** enhancement and **skill** development (KASA). At the educational materials will be used at the **activities** level in workshops conducted for the elected and appointed officials, and in public forums to educate the community residents and obtain their input about zoning. Community residents and elected and appointed officials will be expected to attend (**participation** level) and actively enter into the process (**reactions** level). To reach the desired outcomes at the SEE level, elected and appointed officials will develop policies at

the **practice** level based on scenarios they develop due to their learning experiences throughout the programming cycle.

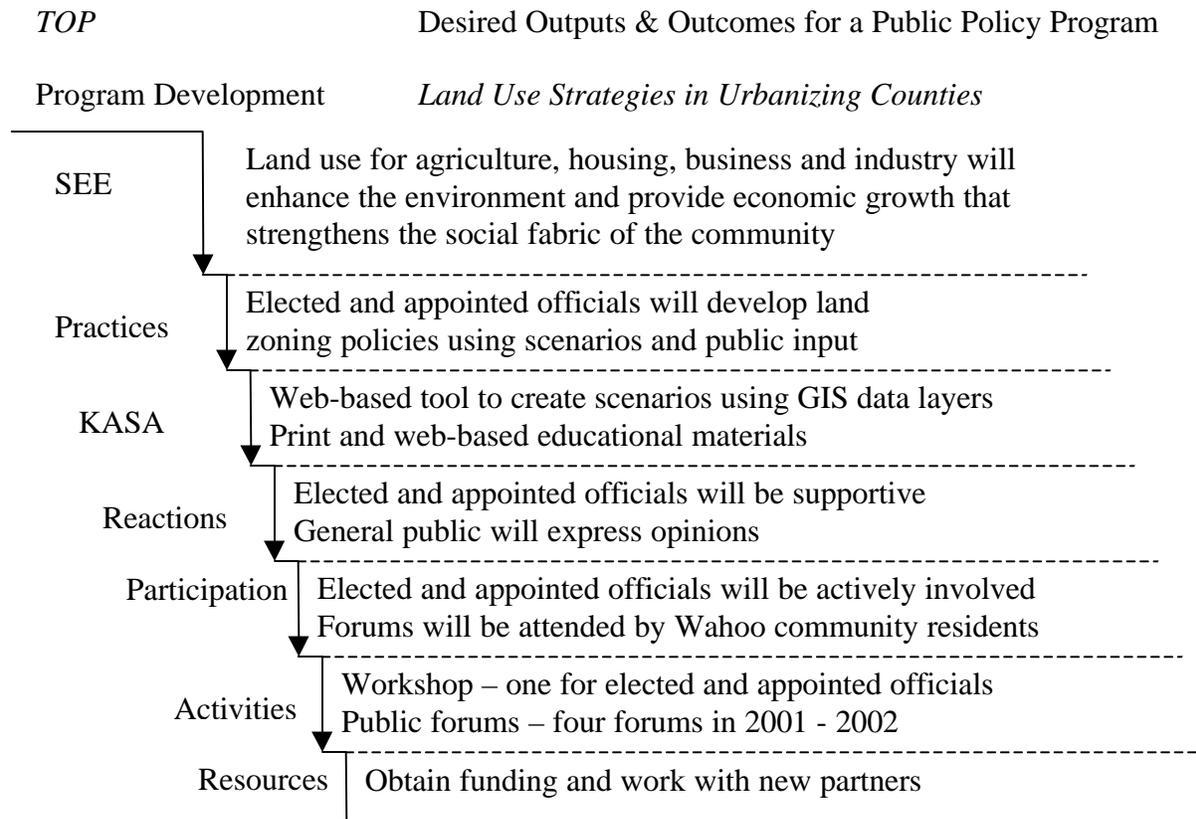


Figure 3. Illustration of Outcomes at the Seven Levels of TOP

The design of the public policy program on Land Use Strategies in Urbanizing Counties illustrates how a theoretical framework was followed as the programmers:

- assessed a specific community need and sought out their opportunities to develop a responsive educational program,
- used their educational program capacity in collaboration with other stakeholders to develop programming to resolve the identified social, economic, and environmental need, and
- targeted program outcomes that can be evaluate to judge the merit of the program.

Using TOP to Design an Evaluation Plan Based on the Desired Outcomes

Overview of TOP's Performance Measurement Staircase

Program evaluation can serve dual purposes. First, it helps decide if a program should be continued and, if so, ways to improve its goals and delivery. Second, it documents accomplishments within an organization or agency.

Program performance measurement generally ascends TOP's "programming staircase" on the right hand side of the model (Figure 4). On the program performance side, outcome evaluation can include both process and impact evaluation and can focus on any of the seven levels.

Documentation at the **Resources** level explains the scope of the programming effort in terms of dollars expended and staff time used. Outcomes at the **Activities and Participation** levels are also generally referred to as outputs because they support the volume of work accomplished and are evidence of program implementation. Outcomes that can be measured immediately after program activities at the **Reactions** level are evidence of participant satisfaction; at the **KASA** level, immediate changes in knowledge can be assessed. After programs are delivered, intermediate outcomes at the **KASA** level focus on knowledge retained, attitudes changed, skills acquired, and aspirations changed. Intermediate outcomes at the **Practices** level focus on the extent to which best management practices are implemented. These intermediate outcomes can be measured a few months or a couple years after programming. They lead to the longer term social, economic, and environmental changes. Identifying outcomes at the **SEE** level for local programming can be assessed fairly quickly but state, regional, or national outcomes can take years to assess and can be very expensive.

Targeting Outcomes of Programs (TOP)

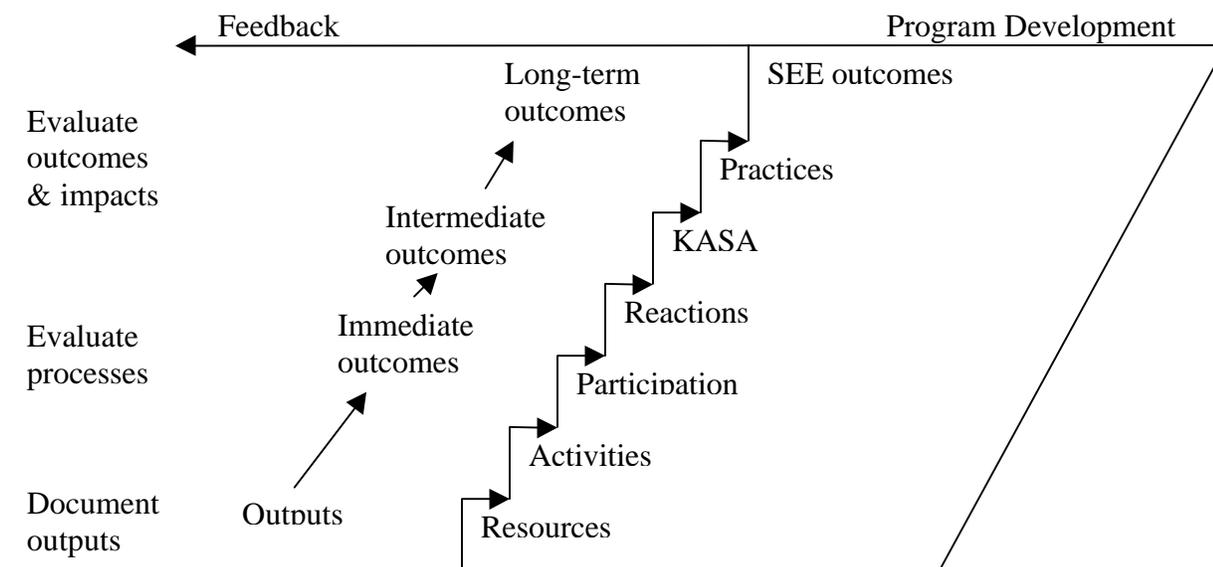


Figure 4. Schematic of Program Performance Using TOP

Selecting Outcomes to Measure and Designing the Evaluation Process

Based on the programmers' needs, along with the agency's needs, the programmers select the program outcomes on which they need to develop a multi-dimensional evaluation plan. For the program on Land Use Strategies in Urbanizing Counties, the programmers designed an evaluation that will assess the process they developed and results that emerged from their programming. Specifically, the evaluation will target the following outputs or outcomes (Figure 5):

- Elected and appointed officials will use the web based GIS data layers model to create scenarios for future land use planning.
- Community residents will learn about environmental, economic, and social-cultural issues that impact land use as they will participate in a decision making process.
- Elected and appointed officials will use the models they develop, the educational materials developed, and the input from community residents to make decisions about future land use development that will protect or improve the environment, the economy, and the social culture.

In the future, an evaluation will target the following long-range outcome:

- Other regions through out the U.S. will use this model along with the materials that have been developed for sustainable comprehensive land use planning in their region, and they will develop policies that will protect or improve the environment, the economy, and the social culture.

The Evaluation Plan for *Land Use Strategies in Urbanizing Counties* (Figure 5)

Outcome #1 – Elected and appointed officials will use the web based GIS data layers model to create scenarios for future land use planning.

Specific information needed (Indicators)	Data collection method(s)	Data collection dates	Data source(s)	Who responsible?
Use of the web site Problems encountered User-friendliness	Focus group interviews	Spring 2002	Elected & appointed officials	Extension educator
Scenarios created	Expert review	Spring 2002	Elected & appointed officials	Consultants

Outcome #2 – Community residents will learn about environmental, economic, and social-cultural issues that impact land use as they will participate in a decision making process.

Specific information needed (Indicators)	Data collection method(s)	Data collection dates	Data source(s)	Who responsible?
Demographic data on attendees	Meeting sign-in sheets	At each public forum	Forum attendees	Extension educator
Knowledge gain	End-of-forum written instrument	At each public forum	Forum attendees	Extension educator
Input on land use concerns/issues	Newsprint recordings	At each public forum	Forum attendees	Graduate student

Outcome #3 – Elected and appointed officials will use the models they develop, the educational materials developed, and the input from community residents to make decisions about future land use development that will protect or improve the environment, the economy, and the social culture.

Specific information needed (Indicators)	Data collection method(s)	Data collection dates	Data sources(s)	Who responsible?
Use of scenarios Use of public input Decision-making process	Personal interviews	Spring 2003	Elected & appointed officials	Graduate student
Land-use policies co-existence between: -agriculture -housing -business -industry	Record analysis	Spring 2003	Records	Extension educator working with consultants

Outcome #4 – Other regions through out the U.S. will use this model along with the materials that have been developed for sustainable comprehensive land use planning in their region, and they will develop policies that will protect or improve the environment, the economy, and the social culture.

Specific information needed (Indicators)	Data collection method(s)	Data collection dates	Data source(s)	Who responsible?
Demographics of parties interested in using the materials -Name -Address -Phone -E-mail -Agency affiliation -Date of interest	Form to complete	At regional and national presentations Through a national distribution process	Interested parties	Extension educator Partners
Follow-up on how other parties used the materials	Yet to be determined	Yet to be determined	Names gathered above	Extension educator

Conclusion

The framework in Targeting Outcomes of Programs (TOP) provides a theoretical structure as...

...Staff ask:

- What specific societal needs and issues can we address?
- Which needs and issues are the most important ones in our specific situation?
- What practices or behaviors need to change to alter the social, economic or environmental condition?
- What opportunities do we have to develop useful programming?
- Who needs to team partner to achieve desired results?

...Teams ask:

- What social, economic, and environmental outcomes should we expect?
- What short term (immediate and intermediate) outcomes will support the long-term outcomes?
- What success markers, or indicators, will track the extent to which programs are implemented and outcome targets are achieved?
- While we implement the program, how do we track the outcomes and evaluate the program's contributions?

...Agencies/organizations/institutions ask:

- How do we use outcomes tracking and program performance evaluation to improve subsequent programs, document accountability, and market programs?

In short, TOP lays out a theoretical context to help users to:

1. Assess needs within a broad need area;
2. Target outcomes for specific social, economic, and environmental conditions;
3. Assess program opportunities for an agency, organization, institution, or coalition;
4. Design programs to achieve the targeted outcomes;
5. Track the extent to which the targeted outcomes are achieved; and
6. Evaluate the program's contribution to the desired outcomes.

TOP includes a practical hierarchy for (a) targeting outcomes, (b) tracking progress toward achieving targets, and (c) evaluating the degree to which programs impact targeted social, economic, and environmental conditions.

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