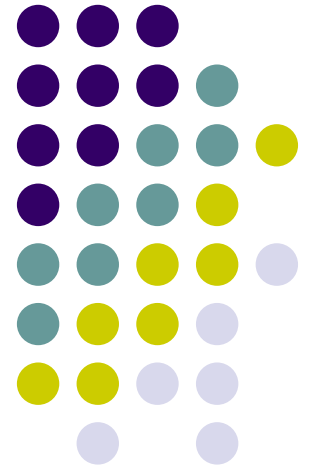


Policy Formulation and Analysis

Workshop for Staff of Regional Civil Society Organizations
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PIANGO / ADB RETA 6319





Contents of this module

- Introduction to policy formulation and analysis
- Steps in policy formulation:
 1. Define the problem
 2. Determine the objectives
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 4. Assess alternative policies
 5. Choose course of action
 6. Monitor implementation
 7. Evaluate after implementation

(This module draws on a course in Public Policy Analysis developed at California State University by Prof. M.A. Saint-Germain.)

Introduction to Policy Formulation and Analysis



- The nature of public problems is such that :
 - they are often ill-defined
 - they have political as well as purely technical aspects
 - they often lack a good cause-effect knowledge base
 - they may be solved but in so doing new problems emerge
 - their solution often involves trade-offs between cost and effectiveness
 - it may be hard to measure adequacy of results
 - it may be hard to measure fairness of results.

Introduction to Policy Formulation and Analysis (continued)



- Traditional research is concerned with broad, theoretical, complex questions. It uses explicit scientific steps and invariant procedures. Policy analysis, on the other hand, is practical, situational and flexible. It addresses local problems and focuses on making decisions. It is more craft or art than science. Having said this, it is important that the approach to policy analysis is as rigorous and evidence-based as possible.

Traditional Research	Policy Analysis
seeks "truth"	is practical
explicit steps and procedures	flexible, situational
addresses broad questions	addresses local problems
focus on complexity	focus on decision-making
science	craft

Introduction to Policy Formulation and Analysis (continued)



Tips for practical policy analysis:

- 1) Quickly identify the central decision criterion of the problem
(What is the most important factor in selecting a course of action to address the issue?)
- 2) Identify what types of public sector actions can be taken
(Taxing, spending, sanctions, incentives, moral suasion, education?)
- 3) Avoid the "one best way" approach
(Have many tools in the tool box, not just one)
- 4) Learn how to deal with uncertainty
(Admit it, estimate its possible effects)
- 5) Say it with numbers
(Charts, graphs, tables, maps, etc.)

Introduction to Policy Formulation and Analysis (continued)



- 6) Make the analysis simple and transparent
(Provide details in a technical appendix)
- 7) Check and re-check the facts
(Use multiple sources of facts, triangulation)
- 8) Learn to anticipate the objections of opponents
(Improves the ultimate product)
- 9) Give analysis, not decisions
(Distinguish between analysis and advocacy)
- 10) Push the boundaries of the envelope
(Expand the problem definition; introduce novel solutions)
- 11) Policy analysis is never 100% complete, rational, and correct
(How much time, money, and personnel is available to do the job?)

Steps in Policy Formulation

1. Define the problem

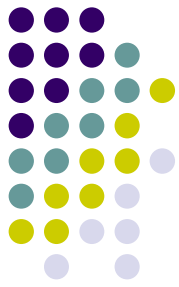
- The first thing the policy analyst must do is to ask:

- 1) Does a problem exist?
- 2) Can anything be done about it?
- 3) Does the client have the power?

If the answers are no, then there is no point in doing a policy analysis.

- Pitfalls in public policy problem definition:

- 1) accepting the client's definition of the problem
- 2) looking only for the simple and obvious
- 3) thinking that any and all problems need a public solution
- 4) confusing the need for short- versus long-term solutions
- 5) confusing the values of individuals versus collectivities





1. Define the problem (continued)

- State the problem meaningfully:
 - Determine the magnitude and extent of the problem
 - Continually re-define the problem in light of what is possible
 - Eliminate irrelevant material
 - Question the accepted thinking about the problem
 - Question initial formulations of the problem
 - Say it with data
 - Locate similar policy analyses
 - Locate relevant sources of data
 - Eliminate ambiguity
 - Clarify objectives
 - Resolve conflicting goals
 - Focus on the central, critical factors
 - Identify who is concerned, and why?
 - What power do concerned parties have?
 - Make a quick estimate of resources required to deal with the problem



1. Define the problem (continued)

- Develop a problem statement, by:
 - 1) thinking about the problem
 - 2) delineating the boundaries of the problem
 - 3) developing a fact base
 - 4) listing goals and objectives for policy solutions
 - 5) identifying the policy envelope (key players)
 - 6) developing preliminary costs and benefits
 - 7) reviewing the problem statement

Steps in Policy Formulation

2. Determine the objectives



- Every time a policy problem is identified, some statement of goals is adopted. The goals are what the adopted policy alternative should accomplish. Goals are broad, formal, long-term problem-solving achievements that are desired.
- Goals are translated into objectives. Objectives are more concrete statements about desired end states, with time tables, target populations, and resource limits.
- Criteria are the measurable dimensions of objectives. Criteria are used to compare how close different proposed policy alternatives will come to meeting the goals of solving the problem. Criteria set the rules to follow in analysing and comparing different proposed policy alternatives (solutions).
- One difficulty in specifying criteria and measures is that many problem statements have vague, fuzzy, or even conflicting goals. This is often necessary in order to get consensus on taking some action about the problem. But this complicates the selection of criteria.

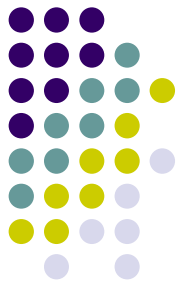


2. Determine the objectives (continued)

- The criteria and their measures should be unambiguous. They should be relatively straightforward and simple to measure. Their application should produce uniform results, no matter who does the measuring of different alternatives. And repeated measurements of the same alternative should produce the same results, again, no matter who does the measuring.
- Types of criteria include:
 - Economic criteria (most policy analysis involves at least one economic criterion e.g. impacts on the economy, on expected public sector revenues, on government spending, etc)
 - Equity criteria (there is no universally agreed or right answer for how benefits and burdens should be distributed in society - that is essentially a political decision - however, there are guidelines for equity, such as non-discrimination, and the same treatment for those equally situated)
 - Technical criteria (including technical feasibility, effectiveness, measurability)
 - Political criteria (considerations include acceptability, appropriateness, legality, responsiveness)
 - Administrative criteria (considerations include authority, commitment, capacity, support)

Steps in Policy Formulation

3. Identify alternative policies



- Before alternatives can be generated,
 - 1) the problem must be correctly identified, and
 - 2) relevant criteria for judging alternatives must be specified
- At first, the policy analyst can generate a large number of alternatives, but later reduce them to a manageable size (between four and seven). Consider alternatives like the status quo, but also radically different. Consider what may be possible under different circumstances.



3. Identify alternative policies (continued)

- Sources of alternative policies include:
 - The status quo or no action alternative
 - Experiences of others with similar problems, from reported research findings etc
 - Re-define the problem from others' points of view, including opponents of any change
 - Consider the ideal, then apply political, economic, and other constraints.
 - Quick surveys, literature review, case studies, develop typologies / use analogies, expert opinion, brainstorming, feasible manipulation, modify existing solutions etc.

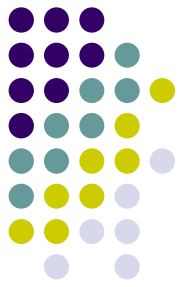


3. Identify alternative policies (continued)

- Pitfalls to avoid include:
 - 1) Too much reliance on past experience
 - 2) Failure to capture ideas and insights (listen, write them down, record them)
 - 3) Too early closure on problem definition
 - 4) Setting a policy preference too soon before all the alternatives are known
 - 5) Criticising new ideas as they are offered
 - 6) Some alternatives are ruled out too early on
 - 7) Failure to re-consider discarded alternatives if conditions change

Steps in Policy Formulation

4. Assess alternative policies



- Select appropriate methods and apply them correctly
- Estimate expected outcomes, effects, and impacts of each policy alternative
- Do the predicted outcomes meet the desired goals?
- Can some alternatives be quickly discarded
- Continue in-depth analysis of alternatives that make the first cut
- Choose a format for display of alternatives
- Show strengths and weaknesses of each alternative
- Describe the best and worst case scenario for each alternative
- Use matrices, reports, lists, charts, scenarios, arguments
- Analytical tools include forecasting, cost-benefit analysis (including sensitivity analysis), risk analysis, and environmental impact assessment



4. Assess alternative policies (continued)

- Forecasting

- The criteria that will be important in assessing proposed policy alternatives determine what needs to be forecast. For example, if the goal of a proposed policy alternative is to lower the teenage driving fatality rate, then what needs to be forecast is the teen driving fatality rate, first under the assumption that no action is taken, and then under the assumption that the policy alternative being considered is implemented.
- There are a variety of methods used to make forecasts. Forecasting methods range from simple stereotyping to complex statistical formulas.
- Theoretical models identify important variables and specify the nature of the linkages among them. Then the model is used to predict outcomes when one or more of the variables are changed. Models are built from information, experience, expert advice, etc. Constructing a model helps to get to the key elements of the situation, and focus on the most important concerns. It identifies the key factors and the relationships among them which will likely be impacted by any proposed policy alternative. It demonstrates the likely consequences of either the no action alternative, or any other rival alternative. Models may be expressed in words, in physical dimensions (e.g., architectural models), or in numerical form.



Forecasting (continued)

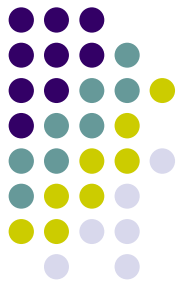
- Extrapolation uses the past to predict the future, assuming there are stable patterns. For example, if the population of an area has been growing at 50% every ten years, then a graph showing past growth can be extended into coming years to predict future growth. Extrapolation is useful for conducting a baseline analysis, showing what is expected if the status quo or no action alternative is adopted. It is relatively simple and cheap and can be accurate in many circumstances. Data can be either raw numbers or a computed rate of change.
- Extrapolation requires precise definitions of criteria and measures, and accurate measurement. It is most often used when there are linear patterns in the data. Extrapolation is less useful in the case of new problems, new issues, or new policy areas, where there is little or no past data.
- The most commonly used form of regression is linear regression, and the most common type of linear regression is called ordinary least squares regression. Linear regression uses the values from an existing data set consisting of measurements of the values of two variables, X and Y, to develop a model that is useful for predicting the value of the dependent variable, Y for given values of X.



4. Assess alternative policies (continued)

- Cost-benefit analysis

- Cost-benefit analysis is a technique used to evaluate and distinguish between alternative investment or public policy proposals. An attempt is made to value in monetary terms all the factors involved, be they commercial, social or environmental, regardless of to whom the costs and benefits accrue.
- Steps involved include:
 - identifying the alternative proposals
 - quantifying the gains or benefits and losses or costs of each alternative
 - discounting the benefits or costs (putting all costs and benefits on a common temporal footing)
 - calculating decision criteria such as net present value, internal rate of return, or benefit-cost ratio
- In its pure form, costs and benefits of the impacts of an intervention are evaluated in terms of the public's *willingness to pay* for them (benefits) or willingness to pay to avoid them (costs). Inputs are typically measured in terms of opportunity costs - the value in their best alternative use. However, less rigorous “back of the envelope “ cost-benefit analyses are also undertaken.



Cost-benefit analysis (continued)

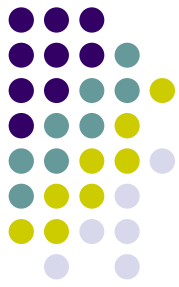
- Controversial issues in the application of cost-benefit analysis include:
 - Which costs and benefits are included?
 - Can all of these be valued in money terms?
 - What is the appropriate discount rate? For example, a high discount rate implies a low value on the welfare of future generations
 - The technique focuses on efficiency, and is less helpful with questions of equity
- The existence of these problems with cost-benefit analysis doesn't mean that it shouldn't be applied in decision-making. It should, however, influence how much weight we give to the results. Carrying out a cost-benefit analysis will reveal a lot of valuable insights in relation to the policy alternatives before us, even if we are not overly confident of the final quantitative results of the exercise.
- Sensitivity analysis - a policy analyst will usually try to see how sensitive the analysis is to changes in assumptions. Things that the policy analyst will test include:
 - the length of the project (how long will benefits continue)
 - the discount rate
 - the value placed on various quantities (costs, benefits, probabilities, etc.)

4. Assess alternative policies (continued)

- Risk analysis



- The level of risk associated with policy interventions is an important consideration in decision-making. Some decision-makers are risk averse, and may want to minimise any possible losses, rather than to pursue the (riskier) maximum possible gains.
- One way to begin to appreciate the different possible outcomes of different policy alternatives is to use quick decision analysis. This is a way to visually represent a small number of alternatives and their consequences.
- Quick decision analysis identifies key issues, and helps the policy analyst to decide what information is necessary to assess each possible alternative. It helps to structure thinking about the probability or likelihood that certain outcomes will occur. It also helps the policy analysts or decision-makers to reveal their attitudes about risk and uncertainty. And it alerts the policy analyst to the possible political ramifications of predicted outcomes.
- The steps in constructing a quick decision analysis are:
 - identify the dimensions of the analysis (problem, alternatives, outcomes)
 - forecast the likely outcome for each alternative
 - assess how likely each outcome is in terms of probability
 - calculate the expected value of each alternative



Risk analysis (continued)

- However, it is important to question quick decision analysis.
 - What studies were used to estimate outcomes and probabilities?
 - What discount rate was applied?
 - What time frame was considered?
 - What were the opportunity costs (how could the money be spent elsewhere?)
 - How sensitive are these figures to changes in the economy?
 - At what probability would the expected value of the two alternatives be equal?
- If there is a great deal of uncertainty about the analysis, there are a number of strategies:
 - delay until more is known
 - map out all uncertainties and the information that is needed
 - collect more data to reduce uncertainty
 - estimate a wide range of possible values for those which are uncertain
 - develop alternatives under a wide range of possible conditions
 - build in more flexibility
 - build in more backup
 - compromise to an acceptable alternative, even if it is not the optimal one
 - choose a strategy that minimizes the maximum possible losses
 - conduct in-depth research to provide the information needed



4. Assess alternative policies (continued)

- Environmental impact assessment

- Environmental impact assessment (EIA) is a method of analysis which attempts to predict the likely repercussions of a proposed development upon the social and physical environment.
- The style of analysis adopted for EIA varies from country to country but common features are:
 - A two-stage approach defining environmental effects during the construction stage (short-term) and during the working life of the project (long-term).
 - An attempt to assess the effects on local employment, services and lifestyle as well as the more directly visible effects on the physical environment, such as noise, air pollution, visual intrusion, land degradation, and watercourse contamination.
- Impact assessments of this kind are “before the event” predictions which are valuable in enabling a planning authority to make a decision on a proposed development , in the public interest.

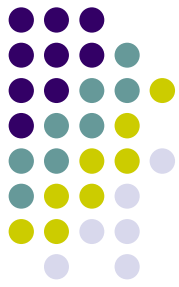


Environmental impact assessment (continued)

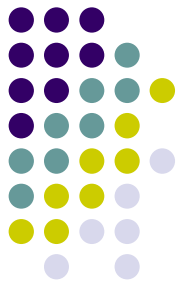
- Stages in the EIA process can be described as:
 - Screening - identifying effects, and estimating their significance
 - Scoping – defining the issues which need to be addressed
 - Baseline study – collecting all relevant information on the current status of the environment (provides a yardstick for future monitoring)
 - Impact prediction – forecasting changes in the environment due to the development
 - Impact assessment – interpretation of the significance of the impacts
 - Mitigation – identifying measures to reduce or remove impacts
 - Producing the Environmental Impact Statement (EIS) collating results of the EIA in a public document
 - EIS review – review of the EIS conducted by the competent authority
 - Monitoring – undertaken during implementation to confirm that impact predictions are as accurate as possible and that no unexpected effects are occurring
 - Post development audit – after development, to check whether predictions made in the EIA were correct
- There are variations or extensions on the EIA process, such as environmental health impact assessment (EHIA) for developments where there is potential impact on human health.

Steps in Policy Formulation

5. Choose course of action



- Policy assessment techniques do not determine which policy should be adopted. Policy analysis presents the benefits and drawbacks of each alternative, but in addition one or more decision rules are needed in order to determine which policy is the "best."
- There are many problems in trying to determine which policy to adopt.
 - 1) Many problems in the public sector have multiple facets. Policies are designed with multiple goals or objectives. There may be no dominant objective, or several objectives may be in conflict.
 - 2) there are multiple criteria to take into account--technical, economic, political, and administrative--but who decides which is the most important?
 - 3) not all important considerations can be converted into comparable units, such as dollar values.
 - 4) which is the proper criterion to use, greatest net present value? greatest internal rate of return? largest benefit-cost ratio?
 - 5) there is often a lack of agreement beforehand on decision rules, or which rules to apply
 - 6) even if each decision criterion is optimized separately, there may still be a sub-optimal choice at the end.

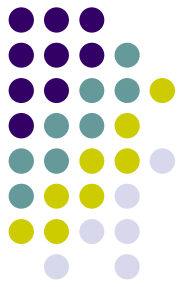


5. Choose course of action (continued)

- The policy analyst is often faced with trying to present multiple policy alternatives which have been assessed in terms of multiple decision criteria. There are various methods which can be used to display this information in a way that facilitates decision-making.
- Methods include paired comparisons, satisficing, grading method, lexicographic ordering, weighted decision criteria, Groller scorecard etc.

Steps in Policy Formulation

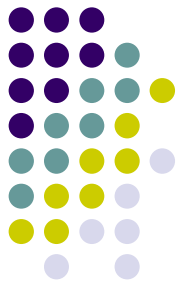
6. Monitor implementation



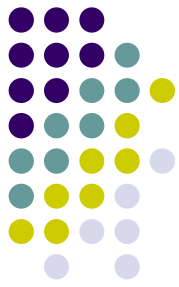
- Policy maintenance refers to keeping the policy or program going after it is adopted. Policy monitoring refers to the process of detecting how the policy is doing.
- To monitor a policy, some data about the policy must be obtained. A good implementation plan will suggest some ways in which ongoing data about the policy can be generated in the regular course of policy maintenance, for example, from records, documents, feedback from program clients, diary entries of staff, ratings by peers, tests, observation, and physical evidence.

Steps in Policy Formulation

7. Evaluate after implementation



- Policy evaluation is the last step in the policy process. It may ask deep and wide-ranging questions, such as:
 - 1) was the problem correctly identified, or was the correct problem identified?
 - 2) were any important aspects overlooked?
 - 3) were any important data left out of the analysis? did this influence the analysis?
 - 4) were recommendations properly implemented?
 - 5) is the policy having the desired effect?
 - 6) are there any needs for modification, change, or re-design? what should be done differently next time?
- When policies fail to have the intended effect, it is usually due to one of two types of failure: theory failure, or program failure.



7. Evaluate after implementation (continued)

- Policy evaluation applies accepted social science research methods to public programs. The same research designs used in laboratory experiments are not always practicable in the field, but the same principles can guide the planning and execution of policy evaluation.
 - **Before-and-After** Evaluation: a policy is evaluated for the changes it has produced since its implementation; the situation is controlled to exclude other possible influences on the outcome.
 - **With-and-Without** Evaluation: a policy is evaluated for producing changes in the target population, compared to another population without the policy.
 - **After-Only** Evaluation: the extent to which the policy goals were achieved, compared to the state of affairs before the policy was implemented; but the situation is not controlled to exclude other possible influences on the outcome.
 - **Time-Series** Evaluation: the changes produced by the policy, tracked over a long time period.