E7: Policy Analysis and Implementation

Module 4 - Policy Analysis: Theories 1

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Module 4

Introduction

The purpose of Module Four is to introduce you to different approaches to policy analysis. You will consider various types of frameworks, theories and models. Module Four will identify and describe three such approaches, while Module Five will do the same for an additional three. At the end of Module Five you will compare similarities and differences among all the models.

The first section of Module Four will focus on the need for better theories in the policy-making process:

- Simplifying a complex world

- Theories and conceptual frameworks

The remaining sections will provide summaries about the following policy-making models:

- The stages approach

- The institutional rational choice (IRC) approach

- Ambiguity, time and the multiple streams approach

By the end of this module you should be able to:

Outcomes

- *explain* why theories in policy analysis are necessary.

- *identify* the three types of policy analysis models presented and describe how each works.

- *analyse* authentic case studies in light of the information presented in this module.

The need for better theories

Simplifying a complex world

As discussed in Module Two – Policy Formulation Process: The Process, Structure and Context of Policy-making, public policy-making can be viewed as a series of interlinking and overlapping steps including: issue search and identification, government agenda-setting and issue filtration, the development and selection of policy alternatives, and finally, policy implementation, evaluation and revision.

The policy process involves a complex set of interacting elements, which themselves change over time. The following are some of the more significant factors that contribute to the complexity of policy-making:

- **The actors**
  The actors in the policy-making process are vast and diverse. Examples include interest groups, ministers, civil servants, the media and the public at large, all of whom often have competing interests and policy preferences.

- **The policy cycle horizon**
  This is the minimum amount of time needed to complete a policy cycle and, as cited most often in policy literature, is at least a decade. However, more recent research shows that policy cycle durations of between 20 and 40 years may actually be required to understand how a variety of socio-economic variables interact with one another (Derthick & Quick, 1985).

- **Levels of government**
  It is common that multiple programmes at multiple levels of government (federal, provincial/state, local) are proposed as a solution to a policy issue, requiring the co-ordination of different organisations with conflicting preferences.

- **Consultations and research**
  Informing the policy process can involve a variety of activities, such as policy debates, consultations, hearings and external research.

- **Multiplicity of interests**
  We need to accept that most actors in the policy process have policy preferences based upon deeply held beliefs, morals and values, and/or large vested interests in time and money. As a result, these actors are prone to bias in presenting only selective information in public discourse (Sabatier, 1999, p. 4).

The sheer complexity of the actors and factors to be considered in developing policy makes analysis itself complex. Policy analysts must find methods of simplifying the circumstances regarding a specific policy, as it is not possible to research every aspect of a situation due to time and other resource constraints. Thus, methods for simplifying and/or organising information are necessary for the policy analyst to understand and provide valuable input into the policy-making process.

The various policy analysis approaches that you will encounter in Module Four and Module Five are useful because they assist in policy analysis by identifying the most important factors requiring further study, as well as those factors that can be safely ignored. As well, they provide the categories or methods of organising how events, actors, or related phenomena are to be grouped for analysis. These models offer different perspectives or lenses to understanding an issue and thus identify different things about the same situation, at least initially.

Two different strategies for developing these lenses exist. On the one hand, a policy analyst may use specific methods, using his or her own

experience and expertise to develop assumptions and categories by which to study the issue. However, such a strategy invariably leads to inconsistencies and errors since the method does not itself require explicit methods to identify assumptions and presuppositions, thereby making it difficult to find and correct them, especially by others.

On the other hand, the scientific strategy is based on the assumptions that underlying large complex issues is a smaller set of critical relationships. Sabatier (1999, p. 5) identifies a number of particular characteristics for this strategy.

- Data acquisition methods and analysis should be transparent and able to be replicated by others.

- Concepts and propositions should be clearly stated and consistent with other empirical propositions.

- Any relevant uncertainties or limitations of the theory or model should be identified or addressed.

- Methods and concepts (packaged as theories) should be subjected to review and criticism by experts in the field.

It is important that policy analysts are knowledgeable about different approaches to analysis and are capable of applying several different theoretical perspectives. By applying different perspectives to the same phenomena, the analyst is forced to clarify the differences in assumptions across frameworks or theories explicitly. Multiple theories help shape a stronger hypothesis that point to the favouring of one particular theory over another, thus potentially yielding more useful policy analysis.

Theories and conceptual frameworks

Elinor Ostrom (1994) provides a useful distinction between the three different levels of policy-making methods. She defines a conceptual framework as an instrument to identify a set of variables and the relationships among them that are believed to cause a set of outcomes. The framework need not be detailed, but a well-developed one would probably include an understanding of the directional impact of variables upon one another and some hypotheses. Ostrom defines a theory as a deeper, more logical and coherent set of relationships. Theories try to apply values to variables and try to specify how relationships change when specific variables are manipulated. Any one conceptual framework could spawn any number of different theories. Finally, she defines models as much narrower in scope and with more precise assumptions than theories. Ostrom suggests that ideally, models are mathematical. Ostrom sees conceptual frameworks, theories and models as existing along the same level with each sub-level identifying the connections of variables better as the scope is narrowed.

The stages approach

The most influential framework for understanding the policy to date has been the stages approach, which was first articulated by Harold D. Laswell in the 1950s. The policy process was divided into a series of discrete stages, similar to the process mapped in Module 2 – Policy Formulation Process: The Process, Structure, and Context of Policy-making. Initially, Laswell's approach was found to be very useful with respect to complex policy issues as it stimulated research in each of the discrete stages he identified.

Stages approach overview

Laswell was particularly interested in the role of knowledge of the policy process and knowledge in the policy process (deLeon, 1999, p. 20). He constructed a conceptual framework with the purpose of providing a "generalistic image of the major phases of any collective act" (Laswell, 1971, p. 28) and identified seven different stages, which he would later refer to as "the decision process". The seven stages of the policy decision process he initially identified are the following (Laswell, 1956):

1. intelligence
2. promotion
3. prescription
4. invocation
5. application
6. termination
7. appraisal.

This policy process reflected the procedures by which policy is proposed, filtered, implemented and terminated. In the 1970s, a student of Laswell's, Garry D. Brewer (1974) re-examined the seven stages approach and proposed a more refined list. The six stages of Brewer's policy decision process are:

1. initiation
2. estimation
3. selection
4. implementation
5. evaluation
6. termination.

Brewer's re-definition of the stages of the policy process has been the basis of much of the research in policy sciences to date. The framework provides a way of looking at public policy as a concept as well as an operational tool. Individual stages are distinctive from one another and take on a life of their own within the process. In reality, even though it might be difficult to avoid overlap between the stages, Angela Browne

and Aaron Wildavsky argue that conceptual distinction between stages, particularly between implementation and evaluation, should be attempted. They suggest that a conceptual distinction of stages helps organise what information is relevant for a particular stage and how it should be used, thus protecting the process and policy from actions being taken that are not beneficial for other stages and/or for the process as a whole.

Since Brewer's deviation from Laswell's stages, many other policy scientists have used the conceptual framework of delineated stages in a sequence. These include works done by Charles Jones, James Anderson, Peter deLeon and Brewer himself.

Strengths and weaknesses of stages theory

deLeon studied the strengths and weaknesses of the policy process as delineated into distinct stages within a framework and how this affected research in the policy sciences. There are three main benefits of the introduction of the stages approach. First, research emphasised the complexity of policy and resulted in the development of models that may have been overlooked by economists and social scientists. Second, policy research expanded beyond public administration into the political sciences and economics, thus rationalising the problem-oriented perspective. Finally, the framework allowed for the explicit inclusion of personal preferences and social norms into the policy process, which were often ignored by political science and economic observations.

Negative implications of the stages approach include an over-emphasis and focus on individual stages in the process, resulting in a myopic view of individual stages and neglect of the policy process as a whole. As such, the process appears disjointed, with discrete stages developed by different sets of actors, which is in contrast to the dynamic, continuous reality of the policy process. The stages approach also assumes linearity and an end or completion of the policy process. Stages are assumed to require completion in consecutive order. However, this does not reflect reality in that feedback is usually an ongoing occurrence, looping one or more previous stages to one another.

Search for better theories

While the stages approach gained wide acceptance and spurred policy research, the actual usefulness of the approach as a paradigm was questioned when considered against reality. Robert Nakamura (1987) purported that the stages as defined by Laswell, Brewer and other stages approach advocates could not be nearly as distinctly defined in reality as they suggested. As such, Nakamura believed that the stages approach could not be an effective model for policy analysis.

Paul Sabatier and Hank Jenkins-Smith (1993, p. 3) also argued that the stages approach had "serious limitations as a basis for research and teaching". Sabatier (1993, p. 15) suggested the approach neglected to incorporate the "role of ideas" into the policy development process.

Sabatier (1993, pp. 3-4) raised six other major criticisms of the stages approach as a unifying approach to policy-making within the policy sciences:

1. The stages model is not causal – that is, it does not assist in prediction or even show how one stage led to another.

2. The stages model does not provide the basis by which empirical testing can occur and is not amenable to being confirmed, amended, or falsified.

3. The stages approach is inaccurate in describing the process itself – that is, the definition of stages and their ordering.

4. The stages model is a top-down approach based in legalities.

5. The stages model's unit of analysis is the policy cycle. It neglects to incorporate intergovernmental relations and ongoing policy development.

6. The stages approach is not useful for integrating policy analysis and learning throughout the policy-making process.

While rebuttals are offered for each of these criticisms (including that the purpose of the model is not one of prediction but rather one to understand the interrelated policy sciences, and that Sabatier's narrow focus on the empirical value of the model does not diminish the central theory and functional value of the model), the criticisms levelled at the model only indicate that other perspectives or approaches could be useful. The remainder of the module will describe two additional policy theories.

The Institutional Rational Choice (IRC) approach

The subject of institutional rational choice within the policy field is very broad. As such, this section will focus more specifically on the institutional analysis and development (IAD) framework.

IRC: Institutional analysis and development (IAD) framework overview

Concepts and challenges

The purpose of the framework is to integrate work done within the social sciences, including political science, economics and sociology that focuses on how institutions affect the individuals and their behaviours (Ostrom, 1999, p. 36).

The initial IAD framework developed two key aspects. First, decision-making occurred mainly in three distinct tiers: the operational decision tier, the policy or collective choice tier, and the constitutional tier. Second, the fundamental elements can be used for prediction, analysis and evaluation, and can be applied to analysis of all tiers.

Elinor Ostrom (1999, pp. 36-37) provides some clarification on some key concepts and challenges of the IAD framework.

- The term *institution* within the IAD context can refer to any type of entity, whether they are organisations or rules and structures of patterns used within organisations or across organisations. Although organisations take up buildings and have people working within them, the *institutions* themselves are invisible.

- Usually, decisions or rules made at one tier must occur within a set of rules or structures that exist at another level. As such, institutional studies require that analysis occur of these multiple levels or stages as well.

- An institutional framework needs to understand, compare and apply the theories that affect institutions. Such theories come from multiple disciplines of study.

- Changes in rules in one institution cannot be analysed independently of the effects on other institutions. In institutional analysis, the value of variables/impact of rules across institutions cannot be assumed to be constant. This is referred to as the configural nature of rules, which adds greatly to the complexity of the model.

The IAD framework tells us how rules, physical and material conditions, and various attributes of the community and resource systems affect the structure of arenas, incentives and deterrents that individuals face, and the resulting outcomes. It seeks to empirically understand interactions among various levels of actors within action arenas. The goal is for improved understanding to inform actions, resulting ultimately in efficiency and effectiveness.

The institutional framework identifies the major variables that exist in all institutions but differ in value from one institution to another. The framework organises decision-making into three tiers.

1. At the operational tier, actors interact within the context of incentives they face to generate outcomes directly in the real world.

2. At a policy or collective choice tier, decision-makers are required to make policy decisions that affect the structure of arenas. This in turn affects individuals working at the operational tier, where operational decisions impact the physical world.

3. At the constitutional tier, decisions are made about who is allowed to participate in the policy-making process legitimately and what the rules are for the policy-making process.

A fourth, less-commonly examined tier is the meta-constitutional tier, which is a level of rules underlying all other tiers.

Action arenas

The first step in problem analysis is to identify the appropriate conceptual unit of analysis, which in the IAD framework is referred to as an action

arena. The action arena is used for analysis, prediction and explanation of behaviour within institutional arrangements.

Action arenas refer to the social space in which individuals interact, for example, to purchase goods and services, work, or solve problems. The concept of the arena may occur in formal settings such as the legislatures, courts and regulatory agencies, or informal settings such as collective choice arenas generally used in the policy-making process. Informal settings include gatherings, appropriation teams and private associations, to name a few. All action arenas must include an action situation and actors within that situation.

Action situations

Action situations are characterised by way of seven different "clusters" of variables: participants, positions, outcomes, linkages between actions and outcomes, the control that participants exercise, information, and the benefits and costs related to outcomes (Ostrom, 1999, pp. 36-37). The number of times that a situations occurs, be it known or unknown also affects the strategies that actors will select. Actions and accumulated results within an action arena are accepted as "given" variables and help describe the structure of the situation.

Actors

The actor in a situation can be viewed as an individual or as a group functioning as a corporate actor. Actions are human behaviours to which the acting individual (individual or group) attaches meaning. For example, non-action after consideration of a particular issue can be thought of as a decision to take action to do nothing.

The policy analyst is interested in the likely behaviour of each actor in a situation. In order to do this, assumptions must be made. Assumptions about actors can be characterised by four "clusters" of variables: the resources an actor brings to a situation; the values the actor assigns to the states of the physical world, actions and outcomes; the method by which actors attain, process, retain and use knowledge and information; and the processes that actors use to select the course of action to pursue.

Numerous views exist regarding the individual's choice of strategy in a situation. Some argue that the individual weighs the costs and benefits and their likely outcomes to make a decision. Others argue that individuals are fallible learners, that they honour trust and reciprocity and existing commitments. These fallible learners also make mistakes, but have the capacity to learn from them.

The most well-established and fully developed model used in institutional analysis is that of *homeo economicus* developed in game theory and neo-classical economic theory. It assumes that actors have complete information, have ordering preferences, and seek to maximise the value of expected returns. Many advocates of this model also suggest that cost and benefit calculation also include the time and resources put toward maintaining relationships and building trust.

The model involves extreme assumptions, such as: unlimited resources, full capabilities for computing costs and benefits, and the ability to maximise utility. In some settings, the model provides empirically confirmed results. It is particularly useful in institutional analysis within those settings where rules are well-defined and enforced and individual choice is very constrained. An example that fits this description is the modern commodity market.

However, situations commonly exist in which there are multiple players, pooled resources and a lack of information generating and processing capabilities. Here, the assumption of perfect rationality is replaced by the assumption of bounded-rationality – that is, individuals intend to act rationally, but are limited in their ability to do so.

Usually people must make choices with incomplete knowledge, not only with respect to possible options, but also with respect to likely outcomes. In joint undertakings, for example, individuals do not always have access to the same information known to others with whom they interact. It is also difficult to judge how much any one individual is contributing. With pooled resources, especially, there is an incentive for actors to behave opportunistically (and so may contribute incorrect or incomplete information to others) for the benefit of one's own institution. Such behaviour complicates the problem by adding uncertainty to the situation.

Additional factors affecting the action arena

After understanding the variables affecting the situation and the motivational and cognitive structure of an actor, the analyst can look deeper into the factors that affect the structure of the action arena.

The action arena is viewed as a set of variables that are dependent on outside factors. These factors can be "clustered" into three groups (Kiser & Ostrom, 1982):

1. the rules used by participants to order relationships;

2. those attributes or states of the real world that are acted upon in a given action arena; and

3. the structure of the general community in which the arena is placed.

Rules

Rules are defined as a shared understanding among groups of people. Rules are enforced and prescribe what actions (states of the world) are permitted, required, or prohibited. Rules used by individuals may originate from different sources. In democratic systems rules are often legislated and regulated through formal central governments, but may also be passed by regional and local levels of government. Companies and other organisations adopt their own rules about decision-making processes and profit sharing. Families also make rules about acceptable and unacceptable behaviours for family members.

Institutional analysis is concerned with understanding the rules that individuals use to make and justify their decisions. The rules that individuals apply can change and are often adjusted, depending on how relationships are ordered. The main shortcoming of rules is that they are insufficient to deal with every possible situation that may arise. As such, they may not always remain constant. Rules may also lack clarity, be misunderstood, or be applied differently to different people in different situations, thus leaving the door open for lack of consistency in application. Finally, not all rules may be written– some may have become habitual or convention – but are nonetheless required.

According to Ostrom (1999, pp. 52-53), seven types of working rules can be used to understand how rules affect the structure of an action situation.

1. *Exit and entry rules* affect the number of participants, their attributes, resources, barriers to entry and barriers to exit.

2. *Position rules* establish the positions in the situation – for example, how one moves from being a group member to a position of leadership or greater influence within the group.

3. *Scope rules* delineate the potential outcomes that can be affected and how actions link to specific outcomes.

4. *Authority rules* establish the rules for various types of actions that are allowable and by whom.

5. *Aggregation rules* affect the level of control that a participant in a position of choice has available to them – for example, whether certain actions require prior permission or agreement from others before action is taken.

6. *Information rules* affect how information is held and disseminated – for example, what is confidential and what can and must be made public.

7. *Pay-off rules* affect the benefits of costs assigned to particular combinations of actions and outcomes, as well as establishing incentives and deterrents for action.

As mentioned earlier in this section, the set of working rules is configural – that is, the effect of any change in one rule depends on the other rules in use. Rules affect all elements of an action situation and thus are useful for institutional analysis.

Attributes of the states of the world

Variables within an action situation are also affected by the attributes of the physical world. Actions that are possible and the outcomes they can yield are all subject to the state of the physical and material world that is being acted upon. Analysis examines how the world being acted upon in a situation affects the outcome, actions, linkages and information in that situation.

For example, two main attributes of the world around us affect action arenas of institutional arrangements that provide public goods and

services. These are: non-subtractive benefits, whereby goods can be enjoyed jointly and simultaneously by many people and it is difficult to exclude people from obtaining these benefits; and common-pool resources where beneficiaries are also hard to exclude, but each person's use of the resource subtracts units from the amount available in total.

If it is too difficult or too costly to exclude those using the resources that are produced, it is often assumed that the good must be provided publicly rather than privately. When benefits are available to a group, which may or may not contribute to the provision of that good, there is the problem of excludability. Individuals or groups that benefit from a provision of resources while not contributing toward their payment are said to be free-riders.

Where private, profit-maximising investors fund common-pool resources or facilities, there is little incentive to absorb costs that cannot be recovered. Excludability problems facing such common-pool resources lead to the problem of free-riding, which ultimately leads to under-investment in the provision of the resource.

Other attributes of the physical or material world that affect the structure of the action arena are those related to resources systems. Variables include the consideration of whether resources are mobile or stationary, or whether storage of the resource is possible. The size of the resource system, as well as the productivity, predictability and location of resources will impact what arrangements will be necessary, such as the rules surrounding public and private ownership.

Attributes of community

The attributes of a community affect the structure of the policy arena because they:

- set the norms of the generally accepted behaviour within the community;

- indicate the level of understanding about the actors and the structures of the action arenas within the community;

- provide information about the preferences and levels of homogeneity in the community; and

- provide information about the distribution of resources among those affected by an existing policy or policy proposal.

Figure 1 provides a graphical representation of the different variables affecting action arenas in each of the four tiers of situations: operational, collective choice, constitutional and meta-constitutional. The various activities of each one of the multiple levels of analysis are also described.

Figure 1: Levels of analysis and outcomes
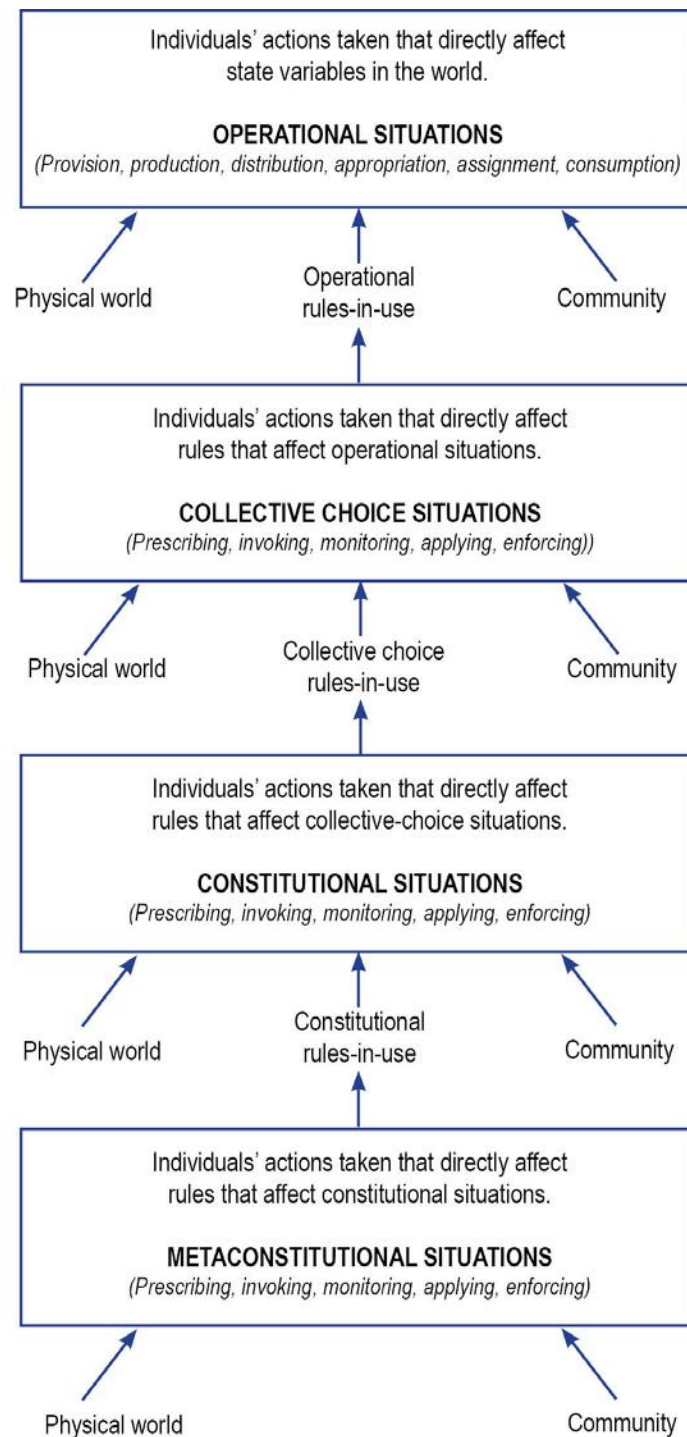
Linking action arenas

Aside from analysis of the factors affecting single-action arenas, an important area of analysis is the examination of the linkages among multiple action arenas. While any single arena can include a number of actors and a variety of chains of actions, the reality is that most social policy is composed of multiple-arenas that are linked sequentially or simultaneously.

When actors want to change the structure of incentives and deterrents to effect a different result (a change in policy), they do so by changing rules that affect interactions within a particular action arena. Institutional arrangements for the co-ordination of complex chains of actions, with numerous actors and multiple organisations, are such that the organisations often compete against one another within a set of rules. An example of such an institutional arrangement is that of the markets, which achieve co-ordination by relying on rules and regulations that govern competitive relationships among the actors or participants.

Just as multiple or nested action arenas can occur at any one level of analysis, nested arenas can also occur across several levels of analysis. The nesting of rules requires that any change to rules be done within the context of the higher levels of rules, and within the constraints of the rules defined by meta-rules for the whole system (see Figure 1: Levels of Analysis and Outcomes for a graphical representation of the relationship among tiers and more specifically the role of the meta-constitutional tier that sets the rules underlying all other tiers).

Predicting outcomes

Depending on the structure of a situation and the assumptions about the actor that are used, an analyst makes inferences or attempts to predict the results. In tightly constrained situations, where there is complete information, actors are motivated to take actions that lead to a stable equilibrium and analysts can make strong inferences about possible outcomes. An analyst examining broader, less-constrained situations makes weaker inferences and predictions about the patterns of outcomes that may result from a specific situation.

Evaluating outcomes

The institutional analyst will also be interested in evaluating outcomes achieved through institutional agreements. Ostrom (1999, pp. 48-49) identifies six main evaluative criteria used by the analyst within the IAD framework:

1. economic efficiency;
2. fiscal equivalence;
3. redistributional equity;
4. accountability;
5. conformance to general morality; and
6. adaptability.

Economic efficiency

Economic efficiency is determined by the level of change in the benefits associated with the allocation of resources. Economic efficiency is often used to determine the feasibility or desirability of public policies. In institutional arrangements, it is important to consider how changes to rules will affect individual behaviour and their allocation of resources.

Fiscal equivalence

There are two approaches to determining fiscal equivalence. First, equity can be assessed on the basis of equality between the contributions made by individuals towards an effort and the benefits they derive from that effort. Secondly, equity can be determined on the basis of the differing abilities of individuals to contribute to an effort. In market economies, the underlying assumption is that those who benefit from a service should be required to finance it.

Redistributional equity

In general, policies that redistribute resources to poorer individuals are valued. General equity goals as well as fiscal equivalence goals will be reduced by redistributional equity considerations.

Accountability

Accountability refers to the notion that political representatives should be held accountable for the use of public resources. Concerns for accountability need not excessively impact efficiency and equity needs, since information generated is also useful to individuals and decision-makers. Institutional arrangements that effectively aggregate and disseminate information are often better able to achieve efficiency and equity objectives.

Conformance to general morality

This refers to the evaluation of the level of morality fostered by a set of institutional arrangements. A broad variety of issues could be relevant here, such as the risk of high payoffs for undetectable cheating in the system or reward systems for those who fulfill their obligations.

Adaptability

As an evaluative criterion, adaptability refers to the ability of institutional arrangements to adapt to ever-changing environments and the use of resources within this context. If institutional frameworks are too inflexible to deal with unique conditions, they will be less effective. One method used to select alternative institutional arrangements is to consider trade-offs. Trade-offs are most often used to measure performance when alternative methods to fund public projects exist.

Figure 2 provides a graphical representation of the IAD framework. The framework can be applied to each of the tiers or action arenas discussed earlier.

Figure 2: A framework for institutional analysis
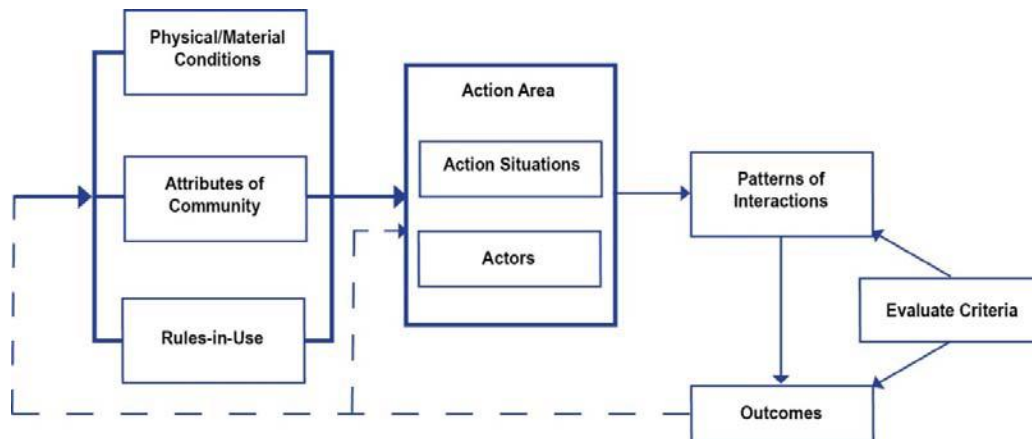
Source: (Ostrom, Gardner & Walker, 1994, p. 37)

The application of the IAD framework in the real world can be examined through a database of cases produced by academics and experts across a variety of disciplines. For example, Schlager studied 50 inshore fisheries and Tang studied 50 irrigation systems. Both were able to isolate key rules that were associated with positive performance. Another database focused on 175 irrigation systems in Nepal (Benjamin et al., 1994) that allowed for the testing of various development theory propositions. For example, using this database, Benjamin et al. have found that the presumption used by development scholars about the inability of local farmers to self-organise and engage in costly collective action without the imposition of authorities was incorrect. Instead, they found that farmer-managed irrigation systems in Nepal outperformed agency-managed systems with regard to agricultural productivity.

Ambiguity, time and the multiple streams approach

The multiple streams approach attempts to explain how policies are created. The key focus is on the policy formulation aspect of the policy-making process. Policy formulation is understood to include agenda-setting and decision-making.

Multiple streams approach overview

The multiple streams approach (also referred to as the lens approach) is a framework that examines policy decisions under the conditions of ambiguity and the assumption of temporal order. Thus, the framework suggests that the adoption of a specific policy alternative depends on when the policies are made.

The framework provides explanations for important issues: how policy-makers ration their attention, how issues are framed, and how and where the search for issues and solutions is carried out.

The current multiple streams approach is based upon the garbage can model developed in the early 1970s by Cohen, March and Olsen. In 1995, John Kingdon adapted the model to the federal government of the United States to provide insight into two pre-decision processes: agenda-setting and alternative specification.

The lens approach theorises at the systemic level, where an entire system or a single decision can be the unit of analysis. Choice is viewed as a collective output that is the outcome of various factors acting upon it. The approach is sensitive to how information affects choice. It focuses on the process of transforming inputs into outputs.

Ambiguity

The multiple streams approach deals with policy-making only under conditions of ambiguity. Feldman (1989) defines ambiguity as "a state of having many ways of thinking about the same circumstances or phenomena". Often, the different states of viewing things may even be irreconcilable. Ambiguity differs from uncertainty, in that uncertainty implies the ability to predict how the future unfolds. Although more information may or may not have the effect of reducing uncertainty, more information does reduce ambiguity (Zahariadis, 1999, p. 74). For example, more information does tell us about the impact of smoking on health, but it does not tell what type of issue it is (such as, whether a moral, political, health or educational issue) nor does it tell us how to handle it.

The "garbage can" model put forward by Cohen, March and Olsen (1972) provides the model of choice which is central to the multiple stream approach. The model explains decision-making in organisations or decision situations, referred to as organised anarchies, where there is rampant ambiguity. These include institutions such as governments and universities.

Three main features characterise organised anarchies. First, participation in the organisation is fluid. Turnover is high, decision-makers float from one decision to another, legislators and civil servants come and go and movements of people between the public and private sector occur. Non-governmental actors, such as trade unions, associations and consumer groups, exercise a significant influence over the types of decisions that are made. Secondly, the issue of preferences is problematic. Policy-makers are likely to leave policy objectives vague, since politicians are faced with time constraints that may force decisions to be taken without first formulating specific preferences for them. Thirdly, how an organisation transforms inputs into outputs – for example, how it uses technology – is unclear. Members of the organised anarchy may be aware of rules and responsibilities, but less aware about how their specific role fits into the overall organisation and its mission.

Temporal ordering

When problems and preferences are not well known, theories based on rational behaviour are of limited use since selecting the policy option that

yields the highest net benefits is not possible. Under conditions of ambiguity we don't know what the problem is and any definition of the problem that does exist is vague and shifting. As such, there is a need to distinguish between relevant and irrelevant information. Choice becomes an attempt to make sense of a situation or issue by using incomplete information.

The lens approach focuses on the resource of time and the constraints upon it as a central concern of decision-makers, as opposed to a central focus on the management of tasks. Peter Drucker, who first put this idea forward, argues that this is the case regardless of whether individuals are elected officials, civil servants, or businessmen.

The multiple streams approach is a process in which individuals are seen to have less control over the issues they want to pursue and instead are more concerned with "addressing the multitude of problems that are thrust upon them, often by factors beyond their control" (Zahariadis, 1999, p. 75). March and Romelaer (1976) state that attention to any particular issue is a function of opportunity, bias, formal position in an organisation or government and the number of issues competing for the policy-maker's attention.

Kingdon's three streams

Kingdon focused his research on trying to understand why some agenda items gain greater prominence than others. He identified three streams flowing through the system: problems, policies and politics. Each individual stream is largely distinct from the others. Each stream has its own rules and dynamics. At key moments, a policy entrepreneur couples the streams. This combination of the three streams into one single package increases the chances that an issue will gain attention by policy-makers.

Problem stream

The way officials learn about conditions and how these conditions are defined as problems determine which policy problems receive the attention of policy-makers. Kingdon suggests there are three methods by which to identify conditions.

1. The use of indicators to assess the magnitude or existence of a condition (for example, statistical rates) whereby large changes in magnitude could be highlighted to gain official attention.

2. Crises or dramatic events.

3. Feedback from existing programmes.

However, Kingdon notes that not all conditions are problems. He argues that problems are distinguished from conditions by the perception and interpretation of participants. Some problems receive more attention than others because individuals apply their beliefs and values to interpret them as conditions, while also placing them in different categories of importance.

Policy stream

Policies include a wide variety of ideas generated by specialist actors within policy communities. Policy communities consist of a network of bureaucrats, government officials, interest groups, the public and any other group that shares a common interest and concern in a given policy area.

Policy ideas are tested in various ways: through hearings, papers, consultations and so forth. Only a few such ideas actually get serious attention. Serious policy contenders are filtered out based on criteria, such as technical feasibility where the more difficult a given policy is to implement, the less the chances of its survival and value acceptability. When proposals are not consistent with the values of policy-makers, they are also less likely to be considered for adoption.

Politics stream

The third stream is politics. This stream consists of three elements: national mood, pressure group campaigns and administrative or legislative turnover. National mood is the notion that a large number of individuals in a given nation are likely to think along common lines and that moods change from time to time. Governments may be alerted to changes in mood, by means such as public opinion polls and then act to promote certain policy proposals. The support or lack of pressure groups also provide signals to politicians and the government about the consensus and dissent in the public arena. Legislative and administrative turnover also affects the policy agenda. Changes in government, especially as new terms commence, can bring sweeping policy proposals on to the policy agenda. The expertise of administrative staff is also important in agenda-setting, whereby turnover may result in certain issues being pushed off the policy agenda and into obscurity. National mood and turnover in government experts yield the most impact on the agenda.

Coupling and windows

Issues are pushed up on the policy agenda when the three streams are joined together at critical times. Kingdon refers to these critical moments as policy windows, which he defines as the opportunity for policy advocates to push their political solutions or to bring attention to their special interests or problems. Policy windows are usually open for short durations and may be as predictable as annual budgets or as unpredictable as natural disasters.

Policy entrepreneurs

Policy entrepreneurs are individuals who promote a policy position for expected future gains in either monetary or non-monetary terms. They must seize the opportunity of policy windows to initiate action otherwise they will have to wait for the next window to come along. Policy entrepreneurs must be skilled in coupling the three streams at critical moments, as joining the streams into a single package increases the chances of the issue making it onto the policy agenda.

Kingdon argues that some issues gain prominence on the policy agenda while others do not because the agenda is determined by events in the political stream from which problems emerge and visible participants, such as elected politicians. Meanwhile, the selection of alternatives occurs in the policy stream with the involvement of usually hidden participants, who are specialists in a given policy area. Although one stream does not determine another, political events outside a policy sector influence the kinds of solutions considered and when windows open.

Kingdon's multiple streams approach addresses the issue of ideas in two significant ways. First, policy solutions are developed not just based upon efficiency or power, but also upon equity, with argument, persuasion and reason being central to the policy formulation process. Second, the lens approach provides cues and meaning to action and shows that politicians can use ideas to define the position of themselves and others.

Assessment of multiple streams approach in practice

Zahariadis (1996) proposes three extensions and one amendment or revision to Kingdon's multiple streams approach based on his research in the politics of privatisation of oil, telecommunications and railroads in the United Kingdom and France. This input increases the scope and opportunity to generalise on the multiple streams approach across several national settings.

First, Zahariadis extends the multiple streams approach to include not only agenda-setting and alternative specification, but also to include the full policy formulation process – that is, agenda-setting and decision-making. While Kingdon examines alternative specification and alternative selection as two distinct phases in the policy process, Zahariadis conceptualises the two activities as part of "decision-making".

Second, Zahariadis argues that the multiple streams approach can be extended to the comparative study of policy. He found that while Kingdon argued that the United States at a federal level approximated the conditions of organised anarchy, he considered the United Kingdom not as anarchic or decentralised, which made conflicting preferences among decision-makers less problematic. Further, United Kingdom government ministers were less fluid – that is, they did not move in and out of public life as much as their United States counterparts. The more limited access to input in decision-making by pressure groups and other actors made the technology of the United Kingdom process much clearer than that of its United States counterpart.

Third, Zahariadis extends Kingdon's approach by allowing for shifts in the unit of analysis. Kingdon's approach referred to a national government and a multiplicity of issues. Zahariadis applied the approach to one issue – privatisation. While Kingdon looked at the entire system as a receptacle of problems, solutions and politics, Zahariadis researched one issue as a receptacle.

Zahariadis's revision to the lens approach concerns the three dimensions of the political stream (national mood, interest groups, and administrative and legislative turnover). He amalgamates the three dimensions into one conceptual variable, which he terms the ideology of governing parties. He argues that this makes sense in countries with centralised political systems and strong political parties. The *ideology of the governing party* or coalition means that parties play a more important role in Zahariadis's approach.

Limitations of the multiple streams approach

Critics have identified five main drawbacks of the multiple streams approach.

- **First**, critics question the argument that the three streams are largely independent of one another. Mucciaroni suggests that the streams may be better understood by viewing the streams as interdependent, whereby changes in one stream could trigger changes in another. This implies that coupling occurs much less by chance than previously presented; instead the process is more purposive and strategic.

- **Second**, critics argue that in Kingdon's understanding of policy windows as temporal and both predictable and unpredictable, the role of windows in coupling is unclear. Zahariadis proposes two hypotheses: 1) when windows open in the problem stream, coupling is likely to find a solution to a problem; and 2) when windows open in the politics stream, coupling is likely to find a problem for a given solution.

- **Third**, Zahariadis suggests that entrepreneurial strategy impacts on the coupling of problems and solutions by policy entrepreneurs. While Kingdon assumed that level of ambiguity remains constant, Zahariadis raises the question of the impact of strategic manipulation on ambiguity.

- **Fourth**, critics argue that the multiple streams approach does not pay enough attention to how past actions or policy solutions affect the current debate and thus, current policy choice.

- **Finally,** critics question whether the aims of description and prediction using the given policy approach have been achieved. The two aims should be achieved hand in hand, but in reality, the multiple streams approach seeks to understand and explain more than predict. The lens approach views policy-making as fluid and therefore less-predictable than other policy-making approaches.

Module summary

Summary

The purpose of Module Four was to introduce you to different approaches to policy analysis. Have a look back at the objectives to see if you have benefited from your reading of this module.

The first section of the module discussed the need for better theories by outlining the need to simplify a complex world in order to understand it and the way in which theories and conceptual frameworks are used to achieve this.

The second section reviewed the most widely used policy analysis approach – that is, the stages approach. Having considered the strengths and weaknesses of this approach, you should be able to see the value in exploring and comparing further theories.

The second policy approach examined was the institutional rational choice (IRC) approach. The institutional analysis and development (IAD) framework was outlined. The eight topics within the IAD framework described in the module were:

1. concepts and challenges of IAD;
2. action arenas;
3. action situations;
4. actors;
5. factors affecting the action arena;
6. linking action arenas;
7. predicting outcomes using IAD; and
8. evaluating outcomes.

Finally, the last section of the module reviewed the ambiguity, time and the multiple streams approach. Your overview of this approach includes the following concepts:

- ambiguity;
- temporal ordering;
- Kingdon's three streams (problems, policies and politics);
- the multiple streams approach in practice; and
- the limitations of the multiple streams approach.

Self-study questions

Study skills

1. What are the major differences between the multiple streams and the institutional rational choice approaches? Why is Kingdon's three streams (problems, policies and politics) considered to be more practical?

2. Much of the policy analysis that is used in public debates today comes from interest groups committed to one side of the issue or another, or from think tanks that espouse a particular ideology. Do you think these commitments make the quality of the analysis suspect? Why or why not?

3. Should policy analysts try to deal with the fundamental causes of social problems such as crime or poverty; or aim for a more pragmatic and limited approach that may be more realistic and more politically acceptable? Why do you think so?

4. Review all the theories or approaches discussed in this module. Which do you think is more persuasive? Why is that?

References and further reading

References

Benjamin, P., Lam, W. F., Ostrom, E., & Shivakoti, G. (1994). Institutions, incentives, and irrigation in Nepal. *Decentralization: Finance and management project report.* Burlington, Vermont: Associates in Rural Development.

Brewer, G. (1974, September). The policy sciences emerge: To nurture and structure a discipline. *Policy Sciences 5(3)*: 239-244.

deLeon, P. (1999). The stages approach to the policy process. In P. A. Sabatier (Ed.), *Theories of the policy process* (pp. 19-32). Boulder, Colorado: Westview Press.

Derthick, M., & Quick P. (1985). *The politics of deregulation*. Washington, D.C.: Brookings Institution.

Feldman, M. S. (1989). Order without design: Information production and policy-making. Stanford: Stanford University Press.

Hogwood, B. W. & Gunn, L. A. (1984). *Policy analysis*. New York: Oxford University Press.

Kernaghan, K. & Siegel, D. (1999*). Public administration in Canada.* (4th Ed.). Scarborough, Ontario: International Thomson Publishing.

Kiser, L. L. & Ostrom, E. (1982). The three worlds of action: A metatheoritical synthesis of institutional approaches. In E. Ostrom (Ed.), *Strategies of Political Inquiry* (pp. 179-222). Beverly Hills, California: Sage.

Laswell H. D. (1956). *The decision process*. College Park: University of Maryland Press.

Laswell, H. D. (1951). The policy orientation. In D. Lerner and H. D. Laswell (Eds.), *The Policy Sciences*. Stanford: Stanford University Press.

Laswell, H. D. (1971). *A pre-view of policy sciences.* New York: American Elsevier.

Ostrom, E. (1999). Institutional rational choice: An assessment of the institutional analysis and development framework. In P.A. Sabatier (Ed.), *Theories of the Policy Process* (pp. 35-71). Boulder, Colorado: Westview Press.

Ostrom, E., Gardner, R., & Walker, J. (1994). *Rules, games, and common-pool resources*. Ann Arbor: University of Michigan Press.

Sabatier, P. A. & Jenkins-Smith, H. C. (Eds.) (1993). *Policy change and learning: An advocacy coalition approach*. Boulder: Westview Press.

Sabatier, P. A. (1993). Policy change over a decade or more. In P. A. Sabatier and H. C. Jenkins-Smith, (Eds.), *Policy change and learning: An advocacy coalition approach*. Boulder: Westview Press.

Sabatier, P. A. (1999). The need for better theories. In P. A. Sabatier (Ed.), *Theories of the policy process* (pp. 3-17). Boulder, Colorado: Westview Press.

Williamson, O. (1979, October). Transaction cost economics: The governance of contractual relations. *Journal of Law and Economics 22 (2)* (pp.233-261).

Zahariadis, N. (1996). Selling British Rail: An idea whose time has come? *Comparative Political Studies 29* (pp. 400-422).

Zahariadis, N. (1999). Ambiguity, time and multiple streams. In P. A. Sabatier, and H. C. Jenkins-Smith (Eds.), *Policy change and learning: An advocacy coalition approach* (pp. 73-93)*. Boulder:* Westview Press.