

Policy Instruments in Spatial Planning and Natural Resource Management

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1. What is a Policy Instrument?

- Policy Instruments (PI) are the means or mechanisms used to make sure that the intended target group will perform according to the intended outcomes of a policy.

Alternatively,

- PIs are the means by which the intended outcomes of a policy should impact upon a target group.

Perhaps the first question to ask is: "What is a *policy*"?

- "A purposive course of action followed by an actor(s) in dealing with a problem or matter of concern."
- Policies focus on what is or will be actually carried out, as opposed to what is only intended or chosen from among alternatives.
- Policies are relationships between authoritative institutions and people (e.g. government and citizens) in which the institutions endeavour to change people's behaviour.

This last point of a power relationship is very significant in understanding policies, and thus policy instruments.

In general terms, Bressers and Klok (1988) have said that "Policy Instruments are all those means that an actor uses or can use to help achieve one or more objectives".

However, most studies are directed at external **policy** instruments which aim at *changing, or influencing the behaviour of a particular group of people.*

So PIs do not normally include instruments aimed only at a physical change in the environment, so-called "non-responsive instruments". e.g. water pollution control works, tree plantations, road construction, etc.

Policies - the *why?* question

Policy Instruments - the *what?* question

Implementation of Policy Instruments - the *how?* question

2. Characteristics of Policy Instruments

Characterising or categorising PIs really depends on why we use them, and how. Identifying the characteristics depends on why we want to make a categorisation.

For most practical applications, our reason to categorise is in order to decide what is a "**good**" PI? Or, which PIs are more likely to perform well?

- "Who is implementing the PI?" "for what purpose?"
- "What powers lie behind the implementer?"
- "What/who are the target groups for the implementation?"
- "How does the PI function?" e.g.: through enforcement, persuasion, discussion, bribery?
- "What social-economic elements does it influence?" e.g. financial, information, social, cultural, moral, elements. These may be positive or negative e.g. financial incentives, or deterrents.

Key Characteristics Influencing PIs

Bressers has highlighted four key characteristics influencing PIs:

The Key Players:

Including both implementing actors and target groups, usually several of each.

NB. PI implementation is never a one-way, top-down process, it is never simply the outcome only of the actions of a policy-making body or the "responsible authority", it is always a multi-actor process.

Goals of the Key Players: (Purposiveness)

- what do the players want?, what are their specific objectives and the relative priority of those?
- are the goals compatible between the players? (distribution characteristic).

- can players co-operate or co-ordinate, or are they in conflict?

Information:

- what do the players (already) know?
- what is the function of knowledge, education, experience, prior information?
- Is information conformable between players?
- Can the players communicate with one another?

Power: (the Guts)

- What is the balance, or imbalance, of power between players?
- NB. There are many sources of power to distinguish - e.g. financial, economic, social, cultural, political culture, class, historical, spiritual, moral, brute force.
- Are players able to integrate power for their mutual use - or is it only confrontational?

3. Types of Policy Instruments

Policy Instruments to Change Behaviour

PIs can be categorised according to the kind of impact they are expected to have on the behaviour of the target groups.

- 1) The PI may have its impact by actually creating or permitting new types of actor behaviour - this is called: setting up the **Existence of alternative behaviours.**
- 2) Or, the PI has its effect by providing information about new types of behaviour -this is

by creating **Knowledge** about **behavioural alternatives**.

There are several sub-types of (1) and (2):

1.a **Eliminate a behavioural alternative** Elimination works successfully only if prohibition is backed up by real sanctions, e.g. absolute closure of an alternative behaviour, prohibition, or directives. (This may be used in conjunction with 1 c/2a).

1.b **Create a new behavioural alternative**

e.g. set up possibilities for new behaviour by people after providing infrastructure, or R & D, or research.

1.c or 2.a **Change the pros and cons of a behavioural alternative;** i.e. change the characteristics of the behavioural alternative. e.g. subsidies, permits, charges, price controls, tax breaks. These account for 50% of all PI instruments in Europe.

2.b **Provide information about a behavioural alternative** 2b) and 2c) often work together because 2c) is often a form of persuasion. i.e. information on impacts and their priorities; public education; advice.

2.c **Change the weighting criteria** NOT change the magnitude of an impact, but change the importance of an impact in the view of the target group.

4. Practical Categories of Policy Instrument

These general principles can be translated into specific categories of PI which depend on educating,

persuading or enforcing people to change their behaviour, or on changing the environment in which people function.

Communicative Instruments

Instruments aiming at a change of behaviour, especially through providing information about a behavioural alternative (2.b; 2.c).

Regulatory Instruments

Instruments aiming at a change of behaviour, especially through eliminating a behavioural alternative (1.a).

Incentive Instruments

Instruments aiming at a change of behaviour, especially through changing the pros and cons of a behavioural alternative (1.c/2.a).

Non-Responsive Instruments

Instruments aimed at a physical change in the environment; or, instruments aiming at a change of behaviour, especially through creating a new behavioural alternative (1.b). There is no requirement for a direct response, although the behaviour of the target groups is expected to change.

Mixed Instruments

Most real world situations show a mix of policy instruments, especially a combination of "sticks & carrots" - i.e., regulations and incentives, either simultaneously or sequentially.

registration. patrolling & guarding.
control prices & tariffs. taxes on

Policies	Policy 1	Policy 2	Policy 3
PROBLEM to be TACKLED			
PURPOSE Or GOAL (INTERESTS)			
(Relevant LEGISLATIVE POWERS)			
EXPECTED OUTCOME(S)			
ACHIEVEMENT TARGETS (if any)			
TARGET GROUPS			
PRIMARY INSTITUTIONS INVOLVED			
Other STAKEHOLDERS with their INTERESTS			

5. Environmental Policies / Strategies Analysis Matrix

6. Policy Instruments for 'Sustainable' Natural Resource Management and Land Use

Communicative Instruments

a.k.a. "moral persuasion"
e.g.: information, communication, propaganda. Extension. Research. seminars, round tables, etc. education in schools, etc. arbitration, negotiation, etc. empowerment efforts. Management Agreements, (e.g. Joint Forest Management).

Regulatory Instruments - Control Mechanisms

e.g. land acquisition (by government). land tenure controls, land (re-)distribution, (re-)settlement. land use type zoning: macro zoning, micro zoning, open space controls. environmental controls - quotas, permits, licences, regulations. social controls - quotas, permits, licences, regulations, e.g. building codes; land

unsustainable methods or levels / volumes of production. Maintenance of environmental standards. Fines for non-compliance.

Incentive Instruments

fiscal incentives or negative incentives (i.e. taxes) See Control Mechanisms).

e.g. differential charges & tariffs, or licence fees, cesses, etc.; e.g. on use of water, discharge of air or water pollutants, waste products, packaging. credit schemes. subsidies on inputs or activities; guaranteed market prices. guarantees on e.g. Development Bonds. Improved tenure incentives; environmental contracts; social service contracts. insurance and mortgage policies. Tax breaks, subsidies, etc. to encourage conservation, recycling, rehabilitation, etc. Marketable Permits: on quotas for e.g. fish, wood, wildlife, pasture, nuts. Deposit Refunds: bonds laid by logging or mining companies,

refundable only on evidence of restoration (or used for govt. to restore). Create or support foundations. NGOs, non-profit companies, etc. Management Agreements, e.g. Joint Forest Management; alternative property rights, e.g. in common property resources.

Non-Responsive Instruments

a.k.a. 'technology-based' PIs. E.g.: public infrastructure, e.g. roads, irrigation, markets, plantations, social services. institution building. basic and applied research programmes. Public land acquisition (by govt. or parastatal). Exemption or pre-emption in land acquisition.

Mixed Instruments

e.g.: financial incentives to farmers to change their behaviour along with threats of penalties if they do not (and, both of these alongside providing information); compensation for abandoning forest plots, + fines and sanctions if they continue, + awareness-raising campaign.

7. Criteria for a Good Instrument

How do we know if we have a "good" Policy Instrument?

(Social) Effectiveness:

- The Long-term Results; achievement of long-run goals and policy objectives;
- existence of necessary institutions;
- existence of legal powers;
- an operational instrument;
- SIA and EIA impacts;
- measurable results;

- public reactions & acceptance;
- continuity; sustainability; risk reduction;

(Institutional) Consistency with Objectives:

- Short-term Results; change of conduct or behaviour;
- SIA and EIA impacts;
- accordance with policies, with interests and needs;
- low degree of resistance or sabotage; public acceptance;
- comparability with other PIs;
- continuity; sustainability;
- alternatively - that the PI is flexible and adaptive enough for it to be acceptable to all relevant parties.

(Economic) Efficiency:

- costs; manpower requirements;
- suitable & measurable indicators;
- benefit-cost measures;
- time frame;
- administrative requirements;
- avoid fiscal risk; avoid other risks;
- ability to focus spatially.

(Technical) Feasibility:

- the necessary resources exist;
- existence of institutions; administrative requirements;
- legal powers exist; jurisdiction;
- time frame;
- manpower needs;
- uncertainty levels;
- information requirements;
- (political or cultural acceptance may also be part of technical feasibility);

References

Bressers, J.Th.A.; and P-J. Klok (1988) Fundamentals for a theory of policy instruments. International Journal of Social Economics 15 (3-4) 22-41.