International Society for the Systems Sciences

Social Systems Theory

SST 48 – Viability and Social Change

A farmer owns a piece of land that has been cultivated by successive generations of the same family. One year, an opportunity arises to increase production significantly. By using more intensive methods, the farmer could achieve a much larger harvest and increase short-term profits.

However, there is a potential cost. The new approach may gradually reduce soil quality, increase erosion, and place greater pressure on local water supplies. The immediate benefits are attractive, but the long-term consequences are uncertain.

The farmer therefore faces an important decision. Should success be judged solely by this year's harvest, or should the longer-term condition of the land also be considered?

The dilemma is not unique to farming. Similar questions arise in organisations, communities, economies, governments, and societies. Actions that appear successful in the short term may sometimes create difficulties in the future. Conversely, actions that require short-term sacrifices may contribute to long-term resilience and prosperity.

How then should interventions be judged?

Formal Description

Interventions are often evaluated according to whether they achieve their immediate objectives. While this is important, short-term success alone may provide an incomplete picture of their wider consequences.

A broader evaluative criterion is provided by the concept of viability.

Viability refers to the capacity of a system to persist, adapt, and continue functioning within a changing environment. A viable system maintains access to the resources, relationships, and capabilities required to sustain itself over time while responding effectively to internal and external change.

The viability principle proposes that interventions should be evaluated according to their effects on the long-term viability of the systems they affect and the wider systems with which those systems interact.

This perspective recognises that systems rarely exist in isolation. Organisations depend upon employees, customers, suppliers, communities, and environments. Communities depend upon wider economic, political, and ecological systems. Consequently, improving one system at the expense of the viability of others may create new instabilities and vulnerabilities.

Effective intervention therefore requires consideration of multiple levels of viability, including the viability of the target system, its constituent subsystems, and the wider systems within which it operates.

Plain English Explanation

Many people judge success by asking: Did we achieve the objective?

This is often a useful question, but it is not always enough.

Imagine a company that increases profits by reducing staff training, neglecting maintenance, and ignoring employee wellbeing. The intervention may appear successful at first because profits rise. However, over time the organisation may lose skills, suffer equipment failures, experience declining morale, and become less able to adapt to changing circumstances.

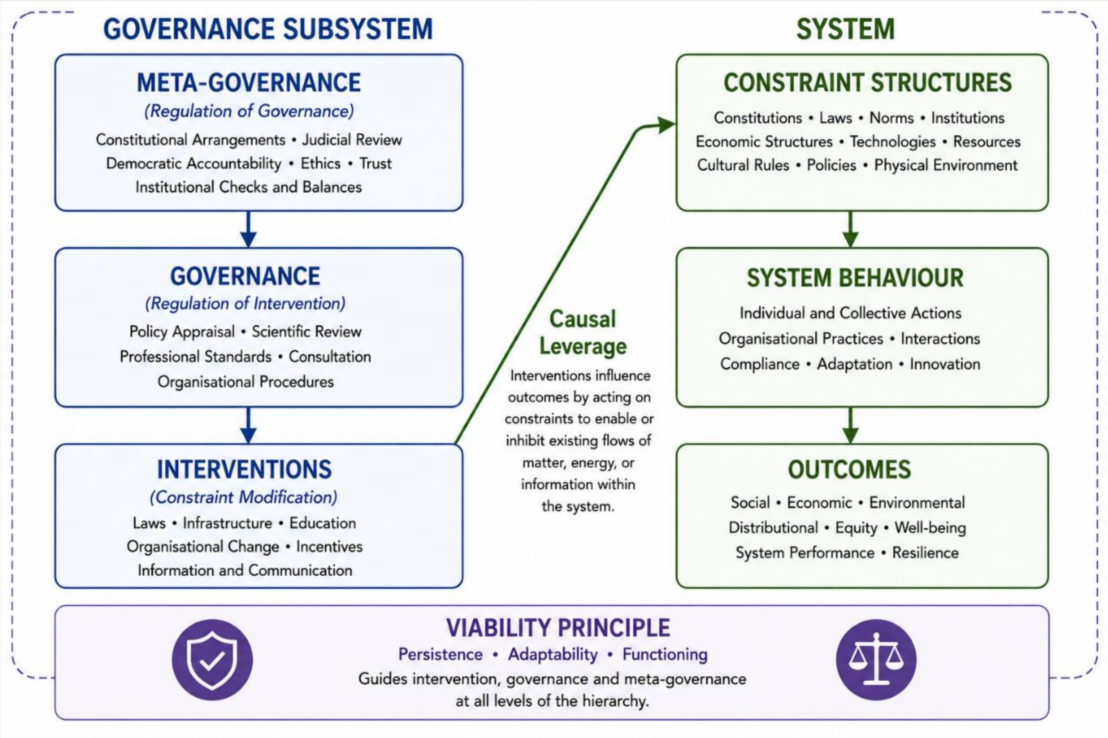
The short-term objective has been achieved, but the long-term viability of the organisation has been weakened.

The same principle applies to governments, communities, economies, and societies.

Viability encourages us to ask a broader set of questions: Can the system continue functioning? Can it adapt to change? Does it support the viability of the systems upon which it depends?

These questions help move attention beyond immediate outcomes towards the longer-term consequences of intervention.

The viability principle does not eliminate difficult decisions or conflicts of interest. However, it provides a useful guide for evaluating alternative courses of action and for identifying interventions likely to support sustainable social development.



Interventions seek desired outcomes but influence them indirectly through causal leverage on constraint structures. Constraints shape behaviour, which in turn produces outcomes. Governance regulates intervention, while meta-governance regulates governance. The viability principle provides an overarching criterion for evaluating decisions and actions at all levels of the hierarchy.

Example 1 – Organisational Sustainability
An organisation increases short-term profits by reducing investment in staff development and infrastructure maintenance. Although immediate objectives are achieved, the organisation becomes less resilient and less able to adapt to future challenges.

Example 2 – Environmental Management
A community extracts resources from a local ecosystem faster than they can be replenished. Economic benefits increase initially, but long-term environmental degradation reduces the viability of both the ecosystem and the community that depends upon it.

Example 3 – Public Policy
A government introduces policies that improve one sector of society while creating significant instability elsewhere. Evaluating the intervention through the viability principle encourages consideration of wider social consequences rather than isolated outcomes.

Provenance and Links

This module builds directly upon:

- Intervention as Constraint Modification
- Constraints on Intervention
- Governance and Meta-Governance
- The Enhanced Morphogenetic Cycle
- Social System Diagnostics

Related thinkers include:

- Stafford Beer (Viable Systems)
- Margaret Archer (Morphogenesis and Social Adaptation)
- Elinor Ostrom (Institutional Sustainability)
- Donella Meadows (Systems Change and Leverage)

Practical Exercise

Think of an intervention that has occurred within a social system that you know well.

1. What was the intended objective of the intervention?
2. Was that objective achieved?
3. Did the intervention affect the ability of the system to continue functioning over time?
4. Did it improve or reduce the system's ability to adapt to future challenges?
5. How did it affect other systems with which it interacted?

Reflect on whether the intervention should be judged solely by its immediate outcomes or by its wider effects on long-term viability.

Looking back across course modules SST 44–48:

- Why was intervention considered necessary?
- How do interventions influence behaviour?
- Why do interventions sometimes fail?
- Why is governance required?
- How should interventions ultimately be judged?

Consider how these questions relate to organisations, communities, governments, and societies that you encounter in everyday life.

The central message of the preceding modules is that social systems are complex but understandable. Through diagnosis, intervention, governance, learning, and attention to viability, it is often possible to improve the conditions under which people and societies operate.