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Building Analytical and Adaptive Capacities for Organisational Effectiveness

By Mia Sorgenfrei and Rebecca Wrigley

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# Table of Contents

Executive Summary ................................................................. 6  
Introduction ............................................................................. 7  
1 Why Analytical and Adaptive Capacities? ....................... 9  
  1.1 Analytical Capacity ......................................................... 9  
  1.2 Adaptive Capacity .......................................................... 10  
  1.3 Linking Analysis and Adaptation ................................. 11  
2 Understanding Analytical Capacity .................................. 13  
  2.1 Observing Reality ........................................................... 14  
    2.1.1 Understanding the Whole ......................................... 14  
    2.1.2 Becoming Aware of Different Perspectives ........... 16  
  2.2 Creating Meaning .......................................................... 19  
    2.2.1 Reflecting Critically ................................................ 19  
    2.2.2 Interpreting Patterns .............................................. 21  
    2.2.3 Thinking Creatively ............................................... 22  
  2.3 Analytical Capacity: Experience from Practice ............ 23  
    2.3.1 INTRAC’s Analytical Skills Training Programme in Central Asia .... 23  
3 Understanding Adaptive Capacities ................................ 26  
  3.1 Sensing Emerging Events ............................................... 26  
  3.2 Adjusting Actions ........................................................... 28  
    3.2.1 Recognising the Challenge .................................... 28  
    3.2.2 Responding to Complexity .................................... 30  
    3.2.3 Moving Beyond Habitual Actions ......................... 32  
    3.2.4 Linking to Organisational Learning ..................... 34  
  3.3 Adaptive Capacity: Experience from Practice ............ 36  
    3.3.1 Analytical and Adaptive Capacities in an International NGO .... 36  
4 Implications for Capacity Building Practice .................... 38  
  4.1 Key Analytical and Adaptive Capacities for CSOs ......... 38  
  4.2 Factors Influencing the Development of Capacity ......... 41  
5 Concluding Remarks and Next Steps .............................. 44  
References .............................................................................. 46
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By Mia Sorgenfrei and Rebecca Wrigley

Keywords: organisational capacity building, analytical capacity, adaptive capacity, complexity theory, systems thinking

Executive Summary

The complexity of the constantly changing environment in which civil society organisations (CSOs) operate has significant implications for their effectiveness. Internal and external pressures continuously challenge their organisational identity and ability to achieve their mission. This can be particularly significant where rapid change processes are triggered by contextual influences, whether negative (such as HIV/AIDS or civil war), or positive (such as increased donor funding).

The capacity of CSOs to analyse and understand their internal and external environment and adapt their strategies to new conditions can help them to respond appropriately to these challenges. However, some do this more consciously and successfully than others. This paper suggests that by facilitating an understanding of analytical and adaptive capacities, and how they can be strengthened, we may help CSOs increase their effectiveness. It offers a cross-disciplinary review of current thinking about analytical and adaptive capacity, drawing on literature from fields such as organisational learning and change, strategic management, systems thinking and complexity theory. It then proposes practical considerations which may guide future efforts to develop the analytical and adaptive capacities of CSOs.
Introduction

The world is changing at an accelerating pace and with increasing complexity. Globalisation, and ever more sophisticated information and communication technologies, have dramatically increased both the range of actors and events which affect life at local, national and international levels. We seem to be ‘living in a much more dense, interconnected world – and the speed of interactions in all societies has increased’ (Morgan, 2005).

As civil society around the world develops, unpredictable and frequently unfavourable environments present major challenges to the diverse civil society organisations (CSOs) that are emerging. They are required to respond within contexts of political and economic instability and to the upheavals brought about by crisis and conflict. CSOs are also required to respond and adapt to new bodies of knowledge and ever changing development targets, whether this is gender mainstreaming, HIV/AIDS or the Millennium Development Goals (MDGs), even if these are not part of their mission and may be beyond their existing capacities.

In regions where civil society sectors are embryonic or emerging, individual CSOs can be relatively inexperienced with limited access to stable funding. This vulnerability often means that they feel obliged to comply with donor or government agendas in order to survive. The situation is not helped by the power imbalances that have persisted, or even deteriorated, within and between the different regions in the world. So how can CSOs stay afloat in this unpredictable sea of change and be effective in achieving their mission?
Rihani suggests that the route to success is to consider development as a ‘local affair’ of survival, adaptation, and learning. Future development interventions would therefore aim to create conditions that enable locally driven development to take place as an evolutionary process where local communities and organisations accumulate knowledge, interact freely in the complex systems in which they operate, and respond to opportunities and threats in their environment. To achieve this, CSOs require the ability to observe and analyse their environment and continuously adapt to new situations by developing flexible ways of operating while staying true to their vision and mission. In doing so, they are anticipating and proactively responding to internal and external forces for change rather than limiting themselves to adopting short-term, reactive coping strategies. To do this successfully, CSOs therefore need the capacity to continuously reflect critically and act effectively.

This Praxis Paper argues that there is a need to recognise and enhance these analytical and adaptive capacities in order to strengthen the organisational capacity of CSOs (i.e. to improve their effectiveness and sustainability in relation to their mission and context). This recognises that the current emphasis on strengthening the technical and management capacity of organisations, rather than analytical and adaptive capacity, has limited the impact of organisational capacity building work with its drives towards outcome measurement and results-based management.

The paper is not a definitive piece of research or a comprehensive review of all the relevant literature. It is a discussion piece which aims to stimulate a debate on analytical and adaptive capacities and their relevance to CSOs. As an overview and exploration of the issues the paper draws on fields such as organisational learning, strategic planning, change management, systems thinking and complexity theory.

In Section 1, we explain what we mean by analytical and adaptive capacities and how the two are interlinked. A suggested model for the process of analysis and adaptation within an organisation is explored. In Sections 2 and 3 we focus on developing a clearer conceptual understanding of analytical and adaptive capacities drawing on insights from existing theories and models. In Section 4 we explore how these concepts might be useful for putting theory into practice to strengthen the analytical and adaptive capacities of CSOs. The conclusion in Section 5 recognises that further questions remain to be answered if practical solutions are to be found for improving existing, as well as developing new, approaches to strengthening analytical and adaptive capacities which are appropriate within different cultures and contexts. Since the aim of this paper is to open a debate on the issues, the next steps are then highlighted indicating how, through INTRAC’s Praxis Programme, practitioners can become engaged in taking forward these challenges.

1 Rihani 2002.
2 Ebrahim 2003.
1 Why Analytical and Adaptive Capacities?

The concept of analytical and adaptive capacities builds on existing practices such as strategic planning and organisational learning. Originally developed for military purposes strategic planning deals with the overall identity, direction, goals and objectives of an organisation. This model, based on a rationalist economic approach, is now being criticised as too reliant on pre-determined outcomes, a ‘knowable’ environment and a predictable future. Planning, deciding, monitoring and controlling the ensuing process may be all that is needed in situations where change is relatively straightforward and easy to predict. However, ‘when you are facing very difficult issues or dilemmas, when very different people need to align in a very complex setting, and when the future might be different from the past, a different process is required’. Those CSOs involved in development are often engaged in processes of social transformation and are therefore inherently facing complex situations and trying to create a future which is different from the past. There is therefore a need to explore different ways of conceptualising strategic thinking, action, reflection and learning to better reflect the open-ended and unpredictable nature of development.

The process of analysis and adaptation described in this paper constitutes a non-linear, flexible approach which recognises that organisations operate in complex environments within which they have many dynamic interrelationships. The process is closely linked to the theory and practice of organisational learning as a developmental process that integrates thinking and doing. Building the capacity of organisations to analyse and adapt can enable them to consciously and purposefully:

- reflect on and make sense of their own reality;
- recognise themselves as an integral part of the whole, i.e. as dynamically interconnected with the wider environment;
- move beyond pre-determined frameworks and habits of action;
- respond proactively to events as they emerge; and
- influence and create alternative realities.

But what do we mean by analytical and adaptive capacities?

1.1 Analytical Capacity

Analysis can be described as the detailed examination of an object, organisation or system in order to interpret or explain it. While cognitive sciences can sometimes

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3 See Mintzberg 2000.
4 See Pasteur 2004.
5 Senge et al. 2004 – attributed to Adam Kahane.
6 From Britton 2005.
give the impression that analysis focuses solely on breaking the whole down into its constituent parts, for the purpose of this paper we argue that it should also include the process of understanding the whole. In this way the analytical capacity of an organisation relates to its ability to examine and understand its internal and external environment and the interactions within and between them. This can be about establishing cause and effect but also about understanding patterns of behaviour and evolution. Analytical capacity can be defined as:

Analytical Capacity (Understanding)
The capacity to observe the whole, identify patterns, reflect critically and understand dynamics and interactions, while remaining open to new ideas and perspectives

Analytical capacity includes the ability to:

- Stand back to observe and reflect on the internal and external context
- Understand larger patterns, dynamics and interrelationships
- Look at issues from many angles and viewpoints
- See beyond established ways of thinking
- Attribute meaning to information
- Identify root causes of success and failure
- Construct simple models to conceptualise understanding

1.2 Adaptive Capacity

Adaptation is a process of adjusting to new conditions to become better suited to the context or environment. Adaptive capacities can enable CSOs to improve their actions as a proactive response to changing circumstances, i.e. to co-evolve with their environment. Adaptation can be described as a process of assimilation and accommodation\(^9\) where through:

- *assimilation*, new experiences and knowledge derived from events in the environment are incorporated into existing ways of thinking about the world.
- *accommodation*, existing ways of thinking are revised according to the new knowledge and lead to new actions or behaviour.

This dual process of assimilation and accommodation, often triggered by change, instability, conflict, or crisis, can enable individuals and organisations to link analysis with adapting the actions they take. Adaptive capacity can be defined as:

\(^9\) Adapted from aspects of Piaget's theory of cognitive development (see Huitt and Hummel 2003).
Adaptive Capacity (Action)

The capacity to strategically adjust thinking and actions in response to changing circumstances based on relevant knowledge and improved understanding

Adaptive capacity includes the ability to:

- Use improved understanding to adjust actions appropriately
- Expand awareness to sense new and emerging events
- Respond proactively to changing circumstances
- Have insights into intended and unintended consequences of action
- Continuously observe and correct course of action
- Draw lessons from changed actions and integrate them into future analysis

1.3 Linking Analysis and Adaptation

Linking the strengthening of analytical capacity with the development of adaptive capacity can provide a basis for ensuring that an organisation has the judgement, self-confidence and time to critically assess a situation and to use this learning to improve actions or strategies. If one happens without the other it may lead to 1) improved understanding but no subsequent relevant action or 2) ill-informed adaptation which responds reactively, and potentially inappropriately to a given situation. Analysis and adaptation should therefore be perceived as integrally linked and interdependent.\(^{10}\)

Within an organisation the process of analysis and adaptation involves the capacity to:

- **Observe reality**: by standing back to ‘see’ and collect information about the complex internal and external environment of which it is part.

\(^{10}\) This has been adapted from the process described in Kolb's Experiential Learning Cycle (Kolb 1984).
• **Create meaning:** by reflecting critically on this information and exploring different perspectives to develop a new understanding that is unconstrained by established frameworks.

• **Sense emerging events:** by identifying wider patterns and events within the environment, whether predicted or not, and deciding which of these might require, or ‘trigger’, a response.

• **Adjust actions:** by making improvements to the approach used, experimenting with innovative ideas and exploring alternative solutions.

While these may take place simultaneously it is suggested that consciously carrying them out as a cyclical process may be more effective. The more integrated and continuous the processes become, the more proactive the organisation can be in its response because it is able to monitor, reflect, and act upon triggers for change. The learning gained from these experiences can then be fed back into future analysis. This is illustrated in the diagram below.

**Figure 1: Process of Organisational Analysis and Adaptation**
2 Understanding Analytical Capacity

In the previous section we explained why we are focusing on analytical and adaptive capacities and suggested a process of organisational analysis and adaptation. In this section we begin to develop an understanding of analytical capacity and suggest that the purpose of being analytical needs to be linked more explicitly to improved actions or policies. Analytical capacities should include, but extend beyond, the ability to reflect on practice and analyse data. They should also involve the ability to look at issues from new perspectives, to think ‘outside the box’ and to develop new paradigms if needed. The process of investigation, of being analytical about our work, therefore requires a continuous process of conceptualising and re-conceptualising. This is not merely about gathering information according to pre-determined frameworks and views of the world. It is also about detecting signs that these frameworks have become inadequate or less relevant, and searching for new ways of articulating or conceptualising the world in order to resolve issues.

Organisations, like individuals, observe and interpret reality according to previous experiences which may then be fitted into received/accepted ways of viewing the world. There may be certain areas of work where organisations primarily build their knowledge base from their cumulative experience of carrying out regular activities - such as delivering services. However, in identifying new areas of work or reviewing strategic directions, the tendency may be for an organisation to base their analysis on predominant models or ways of seeing things rather than thinking afresh. In the aid sector, social development work is complex and very context specific, and those who drive the agenda (e.g. donors) - however well meaning - may find that their current paradigms or models are too often accepted uncritically by development organisations/actors.

Developing analytical capacity therefore involves encouraging organisations to observe their reality and to question received models, modifying them or changing them where necessary. This implies an evolving interaction between theory and practice, as is described in following sections, through:

- **Observing reality** by articulating the view of the world that we hold, and understanding this from different perspectives (concepts).
- **Creating meaning** by selecting ways of collecting, reflecting on and interpreting information in relation to specific situations or issues (data collection and analysis). This new knowledge can then be fed back into the views we hold about the world (back to the concepts again).
2.1 Observing Reality

This first step in the analytical process is an exercise in imaginative description – that is describing a specific situation in detail and as accurately as possible, before proceeding to creating meaning from the information gathered. It involves standing back from reality to see things with fresh eyes and not getting too stuck in habitual ways of perceiving the world. Due to the complex nature of social development, and the dynamic interrelationships involved, developing a view of the world can involve starting to see the world as a ‘whole’.

2.1.1 Understanding the Whole

Organisations, and the people within them, should be seen not just as passive observers of the world but as active participants which are intricately interconnected with the wider system in which they operate\textsuperscript{11}. Conventional analysis has tended towards simplifying complexity by reducing the whole into a series of constituent parts. This reductionist analysis can be a logical way of thinking about machines, which operate as a whole when all the parts are assembled, but is less useful for the dynamic human systems which characterise organisations because of its limited ability to capture:

- the dynamics and interrelationships within an organisation as a ‘living’ system which is constantly growing and evolving
- the relationships and interactions between the organisation and the complex social, political, economic, cultural and physical environment in which it operates.

In contrast, systems thinking is a way of coming to grips with complexity by standing back from and conceptualising the whole. The complexity of human systems arises from the unpredictable nature of the multiple relationships and interactions between the different elements within the system. Systems thinking aims to recognise these interactions ‘in a variety of different directions, i.e. vertical, horizontal and circular, paying much more attention towards capturing flow, movement and dynamics\textsuperscript{12}. It questions the implicit linearity, or cause and effect, that is often assumed between an intervention and a set of consequences. One way to visualise the difference between the ‘mechanistic linear approach and the holistic, systemic approach is to compare the results of throwing a rock and a live bird. Mechanical linear models are excellent for predicting where the rock will end up, but useless for predicting the trajectory of a bird.’\textsuperscript{13}

\textsuperscript{12} Morgan 2005.
\textsuperscript{13} Chapman 2002.
Unfortunately, many resolve this rock/bird dilemma by strapping the rock to the back of the bird, throwing it in the air and hoping for the best.

One characteristic of a system is that the results or effects of some interactions within the system can bring about modifications to the system itself. These ‘feedback loops’ can be difficult to predict and may therefore cause unintended consequences. The development world is littered with such situations. One example is an agricultural research station in Turkey that worked with local farmers to increase the productivity of their barley crop and therefore their income. After seven years of plant breeding experiments they managed to increase productivity by about 20 per cent, which initially delighted local farmers. However, the farmers soon went back to sowing their original barley seed. The researchers had not anticipated that the straw of the new barley was too tough for the farmers’ sheep to eat and therefore could not be used as a winter fodder. This meant that any benefit received from the increased productivity was cancelled out by the reduction in available fodder.

Using systems thinking as part of an analytical process can help individuals and organisations to observe the whole, interpret patterns and dynamics and understand interrelationships. One tool that is being used increasingly to visualise and map complex systems is the rich picture method (see text box below).

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**Mapping a System using Rich Pictures**

Drawing a rich picture is one way of mapping human systems which involve multiple relationships. Drawing pictures can be a better medium than writing for expressing these complex relationships because pictures encourage a more dynamic and holistic representation of a situation - in short they can provide a rich amount of information in an easily digestible form. In the example of farmers in Turkey given above this may have highlighted the multiple uses of barley and how altering one use can affect another.

A rich picture expresses how an individual or group sees a particular situation. The pictures can explore factors in the wider environment, identify issues, problems or concerns and even represent them as metaphors. Pictures therefore allow people to express their ideas creatively, for example:

- as an organogram or organisational drawing – which with lines, bubbles, broken lines, circles etc. represents the nature of relationships
- as a collection of different smaller drawings representing different elements of the situation

The following rich picture came from an INTRAC training course in 2003 where it was used as a group-based activity. This involved an individual identifying an organisational issue that they wanted to share with the rest of the group, in order to get their input and advice.
2.1.2 Becoming Aware of Different Perspectives

Observing reality involves gaining an awareness of the context and nature of the issues an organisation is facing. However, there is also a need for organisations to understand how different groups of people and stakeholders perceive these issues. Trends in social development work have emphasised the use of qualitative research methods and participatory methods of data collection and analysis, giving testimony to the increasing importance attributed to understanding these different perceptions. In addition, the internal perspectives within an organisation may differ depending on the diverse interests of different departments, groupings or individuals. The task then is to bring these different external and internal perspectives into the core of organisational understanding.

Opening the opportunity to explore the different viewpoints within an organisation, and of its different stakeholder groups, can enable an organisation to begin to observe and make sense of its own reality. This may involve taking the time to slow down and allow people to become aware of their own thought processes, or ‘mental models’, but also to explore other perspectives and ways of thinking. Recognising that we each have our own mental models can help when exploring the way different individual perceptions influence processes of collective reflection within organisations (see text box below).
Mental Models

‘Mental models’ can be described as deeply ingrained assumptions and practices that influence how individuals within any organisation or group understand and interact with their environment. According to the organisational learning specialist Peter Senge (1990), such preconceived ideas are shaped by experience, social and cultural background, as well as the organisational context in which these individuals operate. These mental models act as filters for the selection and interpretation of information as it crosses organisational boundaries. Mental models therefore determine the ways in which the individuals within an organisation analyse and interpret information and adapt organisational strategies.

The willingness to recognise mental models and flexibility to revise them within an organisation can be nurtured by striking the balance between creating space for collective reflection and analysis but also providing clear direction and leadership. This can be a long and gradual process since it is often difficult for individuals or organisations to break out of their ‘mental trap’ or mindset.

Encouraging people to stand back from their habitual ways of perceiving the world and not be constrained by pre-determined frameworks can also enhance an awareness of different perspectives. One practical tool that can help to recognise and explore different ways of thinking is the ‘six thinking hats’ methodology developed by Edward de Bono.

Six Thinking Hats

The Six Thinking Hats methodology was developed to help people practise thinking in different ways. The central tool is a collection of six symbolic hats in different colours that represent different thinking behaviours. These hats are indicative of both frames of mind and emotional states. Their purpose is to direct thinking processes, not classify types of thinkers. In a group exercise people can be encouraged to wear different hats to help them to explore different types of thinking behaviour and recognise that all types of thinking can be equally valid when adapted appropriately to different situations. The six thinking hats are:

- White (informative): objective, asks questions, seeks information
- Red (intuitive): emotional and spontaneous, draws on gut feelings
- Black (cautious): considers weaknesses, risks, identifies difficulties
- Yellow (constructive): positive and optimistic, looks for benefits
- Green (creative): explores possibilities, new ideas, alternative solutions
- Blue (reflective): structures the thinking process, provides focus

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14 de Bono 1999.
15 This expression signifies the direct transition from reflection to action.
However, in becoming aware of different perspectives it is important to recognise that some perspectives may be given precedence over others. For example, people may have little confidence in expressing their views, especially in contexts where critical reflection is perceived as negative and where there are limited opportunities for challenging the status quo. There may also be situations where some perspectives are valued more than others, for example within organisations where urban, university educated staff may not fully value the ideas of rural staff who have a less formal education. Dynamic leadership can provide the space and encouragement for collective processes of observation to evolve and for people to exchange ideas and explore different scenarios. Providing a ‘safe’ environment helps staff gain the confidence to challenge and constructively revise individual and organisational mental models. Critical systems thinking takes this further by taking an approach which inherently raises questions about power relations and analyses the motivations and objectives of the stakeholders involved (see text box below).

### Critical Systems Thinking

Critical systems thinking is inspired by the Freirian preoccupation with social transformation and empowerment. The approach draws on the life experiences of different actors and includes relevant stakeholders in a collective process of reflection and negotiation for decision-making\(^\text{16}\). This process raises issues of power but also an awareness of the biases between alternative perspectives by exploring:

- **in whose interest** knowledge is produced.
- **who benefits** from maintaining or changing existing mental models or systems of belief.

Organisations practising this type of approach can develop a more conscious understanding of the role they play, and wish to play, in the systems of which they are part. They can also explore how they want to influence their surrounding environment and therefore be in a better position to envisage scenarios for their active engagement in social transformation (for example, having an influence over those relationships that exclude, diminish and disempower some actors in society and reinforce those in a powerful position). This developmental practice helps those actors with less power to consciously get involved in influencing the world and their place in it, rather than simply responding to existing frameworks.\(^\text{17}\)

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### Observing Reality: Section Summary

This section has highlighted that for organisations to analyse effectively they need to take the time to observe, see themselves as part of a wider system, understand the different perceptions and interactions within that system and have the confidence to start to formulate their own perspectives.

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\(^{16}\) Bammer 2003.

\(^{17}\) See CDRA’s annual reports 2002–3 and 2003–4.
2.2 Creating Meaning

Creating meaning is about making sense of and assigning significance to information and knowledge. It is a process that is deeply influenced by the values and belief systems of those involved and shaped by their culture, community, religion, social relationships, education and so on. This may lead to an inherent bias in the meaning that is created as people tend to seek out interpretations and perspectives which confirm their pre-existing beliefs. However, coherence can be found between different ideas and perspectives by comparing and contrasting, reflecting critically and connecting and interpreting patterns, rather like piecing together and viewing a completed jigsaw. This can, where appropriate, lead to new and creative ways of looking at the world.

2.2.1 Reflecting Critically

Once a rigorous description of the various realities has been institutionalised or given value, the next stage in analysis is to critically reflect on the information and descriptions that have been collected. This can involve questioning the evidence, for example by asking:

- How accurate is the information?
- Which methods were used to collect the information?
- Are there gaps or additional information which would be useful to have?
- Whose knowledge has been included or excluded?
- Whose perspective does the information represent?
- Might the information be biased towards particular perspectives?

In addition, the underlying assumptions and values of those involved need to be recognised and articulated before conclusions are made. Assumptions are the unstated ideas that we accept to be true or take for granted without necessarily having evidence to support them. Values can be described as the ideas or beliefs that people see as worthwhile, meaning those that provide standards of conduct by which we measure the quality of human behaviour.\(^{18}\) Both assumption and values can be very influential in guiding people through a process of reflecting on and interpreting information. However, they can also be potentially deceptive because people may not be aware of the way in which their values and assumptions are directing their reasoning and, consequently, their conclusions.

Since the development sector focuses on processes of social transformation across many different cultures and contexts, the implicit values and assumptions of the different actors involved may vary considerably. If these values and assumptions are not discussed openly and made explicit, it may result in a conflict of values, one value being treated preferentially over another or, ultimately, the wrong conclusion.

\(^{18}\) Browne and Keeley 2004.
being drawn. There are many common, but often unproven, assumptions which some of those involved in development make – such as the preconceived idea that agricultural development will lead to increased incomes or that literacy makes for a more liberal society.

These assumptions and values can lead to inappropriate and/or ineffective development initiatives. For example, after 10 years of civil war on the island of Bougainville in Papua New Guinea a programme was established to support village development committees to set up income-generating projects. Traditional councils of elders were exclusively male so it was assumed that the only way to ensure the inclusion of women was for them to have their own committees and projects. However, many of the projects that were established, such as poultry production, were later vandalised as a result of jealousies between husbands and their wives. On reflection it was recognised that as the local culture was matrilineal, although women were not formally involved in village councils, they did have many informal ways of influencing decisions. Separating men and women had therefore inadvertently emphasised their exclusion rather than promoting their inclusion.

A lack of understanding of the local culture and context can therefore lead to inappropriate conclusions being drawn from a process of critical reflection. However, it can also lead to assumptions that there is a ‘correct’ way to reflect critically which can be used across cultures. In many cultures there are significant barriers to analytical thinking which may require more locally appropriate approaches to critical reflection to be used. For example, in the Cambodian context19:

- People educated up until the 1980s experienced a didactic teaching methodology which actively suppressed independent and analytical thinking.
- A question someone cannot answer will lead to loss of ‘face’, so in general questions (especially ‘why?’) are viewed as something negative, rather than constructive.
- There is a general expectation that everything has a ‘right’ and ‘wrong’ answer, with little tolerance of anything else.

Also, for many cultures critical reflection is not just based on ‘rational’ thinking but also involves a person’s intuition, emotions and empathy. Acknowledging and mobilising these human capacities can be enough to engage people in a much deeper and more reflective process of analysis. This can be encouraged by opening spaces for collective reflection, for example using de Bono’s Six Thinking Hats methodology (p. 14) as a group process (see text box below). However, it must also be recognised that in the wider context of civil society, with organisations openly

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19 See forthcoming Praxis Note: ‘Organisational Learning Across Cultures’ edited by Jenny Pearson, Director, VNBK.
competing for funding and status, it can be both difficult and undesirable for organisations to reflect on, and openly critique, their own work.

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<thead>
<tr>
<th>Using Six Thinking Hats for Collective Reflection</th>
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<tr>
<td>The Six Thinking Hats methodology(^{20}) can be used in a structured sequence for collective reflection, where the members of the group all wear one symbolic hat at a time. This is called parallel thinking and provides focus and a clear direction of the thinking process. For example:</td>
</tr>
<tr>
<td>Step 1: The relevant facts about the issue are explored (White)</td>
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<tr>
<td>Step 2: Ideas are generated about how the issue could be addressed (Green)</td>
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<tr>
<td>Step 3: The benefits (Yellow) and drawbacks (Black) of the ideas are listed</td>
</tr>
<tr>
<td>Step 4: Intuitions and feeling about the alternatives are shared (Red)</td>
</tr>
<tr>
<td>Step 5: The outcome of the process is synthesised (Blue)</td>
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### 2.2.2 Interpreting Patterns

A pattern is a regular and repeated series of events. Analytical processes involve recognising and interpreting these patterns as they emerge. In this way an organisation can begin to make sense of multiple pieces of information. Deriving patterns starts by reviewing and summarising the information collected. This can then be compared and contrasted with the original conceptual framework used. The validity and reliability of the evidence can again be questioned and contradictions identified. Trying to make sense of the information prematurely may lead to false conclusions or to the omission of important information. This stage in the process therefore requires the application of methods for collecting, processing and organising information which are flexible enough to permit reorganisation as additional information confirms or questions existing interpretations.\(^{21}\) This may reveal a need for further data collection to resolve such contradictions.

Where it is apparent that the information does not fit with existing models or frameworks these may need to be revised or reconceptualised. Information can then be shared more broadly within and outside an organisation, to determine whether there is broad agreement about the picture presented. The relevance of existing models or analysis can subsequently be discussed, as well as the possibilities of developing new models.

While the process of interpretation described can help organisations to make sense of the information they collect, there may be considerable resistance to questioning

\(^{20}\) de Bono 1999.

\(^{21}\) Felix Alvarado, personal communication.
established ways of looking at, and interpreting, the world. In some contexts, for example where there is a strong patron-client culture or a recent history of conflict and trauma, people may be reluctant to question or challenge the status quo and feel more comfortable interpreting the world in a way which is familiar and safe. In these situations it is often more appropriate to take a longer-term approach that encourages people to interpret their reality using their ‘wisdom’ or ‘judgement’ rather than falling back on pre-defined ‘answers’.

2.2.3 Thinking Creatively

Organisations tend to interpret their own realities by defining both the area of work they will focus on and how that work will be conducted. The danger is that this may limit the organisation to old and ineffective ways of working and/or to conforming with received and perhaps inappropriate models. The development of analytical capacity is a way of fostering alternative ways of interpreting the world, which perhaps fit better with the reality observed. An important example of how such a ‘paradigm shift’ in development thinking has affected the ways agencies work is Amartya Sen’s work on freedoms, entitlements and capabilities, which shifted the emphasis of human development from a concentration on economic growth to recognition of wider influences on human well-being.

At individual or organisational levels, there can be similar ‘paradigm shifts’ where real insights can be derived from careful consideration, sharing of realities and creatively rethinking the frameworks which describe these realities. For example, indigenous coffee producing co-operatives in Mexico were vulnerable to the fluctuation of world coffee prices and to the exploitative prices paid by the middlemen, or coyotes. However, with the help of external advisors, one co-operative began to analyse the situation differently. As a result of a market analysis they realised that they could reduce their vulnerability and increase their income by by-passing the middlemen and finding new markets for their coffee. This led to the establishment of a very successful chain of urban coffee shops which increased the income received by the co-operative by 1) adding value to the coffee beans and 2) creating a national market for coffee that had barely existed previously.

Creating Meaning: Section Summary

In order to interpret information, organisations need to reflect critically on the values and assumptions of different actors, start to explore the larger patterns and creatively rethink existing frameworks if these prove to be inadequate.

See for example Sen 1999.
2.3 Analytical Capacity: Experience from Practice

2.3.1 INTRAC’s Analytical Skills Training Programme in Central Asia

Shaped by the recent Soviet past and influenced by traditions of hierarchy and conservative attitudes, Central Asia is a region prone to conformist thinking. The formal education system provides little encouragement for critical thinking and, during Soviet times, scientists were expected to produce positive research results in support of the official political discourse. The same word is used in Russian for research and analysis and the prevailing understanding of research emphasises the use of statistics and quantitative data.

Within this context civil society is still in its infancy. This has meant that CSO leaders have limited recognition or influence in society and are often sidelined by government officials, despite the fact that the majority of these leaders have previously served the Soviet government system in managerial positions. Furthermore, few CSOs have emerged from a genuine constituency and most of them therefore struggle to relate to the community groups which their missions suggest they support. In the light of these circumstances, strengthening the skills of staff to understand, analyse and influence policy was identified within INTRAC’s Central Asia Civil Society Strengthening Programme as a key issue for the organisational effectiveness of CSOs in the region.

From 2002–2004, INTRAC conducted an Analytical Skills Training Programme (ASTP) in three countries: Kyrgyzstan, Kazakhstan, and Tajikistan. The programme aimed to help local CSOs engage more effectively in policy influencing by building their capacity to conduct socio-economic analysis. The original focus of the training was to build research skills, but this evolved based on the recognition that many CSOs needed analytical skills and the capacity to think critically. Participants attended five modules over nine months which were structured as follows:

**INTRAC Analytical Skills Training Programme: Course Outline**

**Module 1** presented an overview of development theories, and used the Six Thinking Hats exercise to illustrate that there are different ways of analysing issues. Guidance was given on developing research questions to rigorously describe (‘what?’, ‘how?’, ‘why?’) and propose hypotheses for examination (‘what if?’).

**Module 2** presented different interpretations of the concept of poverty, explored the emergence and practice of social development and social impact assessment as a method of enquiry, and provided the opportunity to practise participatory tools of data collection.

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23 See also forthcoming Praxis Note ‘Building Organisational Capacity through Analytical Skills Training in Central Asia’, by Mia Sorgenfrei (December 2005).
Module 3 examined participatory methods and supported individuals in the development of their own research questions and methodologies. Participants were to carry out the majority of their research before module 4.

Module 4 examined the value of monitoring, evaluation and learning systems. It explored approaches to analysing data (including ways of combining qualitative and quantitative techniques) and supported individuals in their own analysis. In addition, methods of disseminating findings were introduced.

Module 5 took the form of a mini-conference. Participants presented the results of their individual research projects to representatives from the CSO sector, media, academic institutions, and local and national government bodies who participated in feedback discussions on research findings and methods.

In 2005, interviews were conducted with selected ASTP training participants and trainers to obtain an understanding of the perceived and experienced impact of the training. While the primary purpose of the training was to build individual capacity to influence policy, it seems that the knowledge and skills gained can also lead to strengthened organisational capacity if participants are able to share their acquired competencies with colleagues and influence the ways of working in their organisations. INTRAC has also reflected internally on the lessons learnt from implementing the ASTP. The combined areas of learning identified by these reflections are summarised below:

### Key Areas of Learning from ASTP

**Impacts identified by participants:**

- The notion of research was demystified and participants gained the skills to adopt qualitative and participatory approaches to research using a triangulation of different methods.
- The capacity to observe the interaction between organisations and their environment, and to capture complex situations in simple/accessible ways was strengthened.
- Programming and project design became informed by more relevant data collection and stronger data analysis.
- Long-term strategic thinking was enhanced, based on a more intuitive and analytical assessment prior to strategy development and the recognition that there are alternative ways of viewing and addressing challenges.
- Programme delivery integrated needs assessment, problem identification and project planning in consultation with community groups.
- The design of local training programmes was influenced by INTRAC's modular and analytical training approach.
- The ability to monitor, evaluate, and measure the impact of development work on the quality of life in communities was enhanced.
- Organisations gained more credibility for being well-informed and capable of critical analysis. This was recognised by donor agencies and government, leading to more opportunities for funding and collaboration.
• The quality of information disseminated to the media improved and media exposure increased.
• CSO networks were established for evidence-based policy influencing.

Reflections on implementing ASTP:
• In Central Asia some stakeholders were expecting ASTP to focus more on statistics and quantitative research. To avoid these confusions, the purpose of ASTP and the distinctions between research, critical thinking and analysis need to be communicated and clarified at the beginning, especially where the translation of these terms into other languages can carry different meanings.
• The modular approach of the ASTP made it possible for participants to increase their analytical capacity gradually, from one module to the next, as they learned from their experiences. Between the five modules, they carried out tasks related to their research projects, and were able to apply the ASTP methodology in practice through their own work. This allowed them to raise questions that were discussed collectively during the next module.
• Providing follow-up to the ASTP is key to the success of the programme. While mentoring support by INTRAC in Kyrgyzstan was mentioned as valuable, it is clear that the closure of INTRAC’s office in Kazakhstan had a negative impact on the extent to which participants felt they had been able to continue developing their analytical skills.
3 Understanding Adaptive Capacities

In previous sections we have explored the need for organisations to stand back and reflect on their own reality, observe themselves as part of the ‘whole’, and create ideas and perspectives which avoid relying on ‘old frameworks and established ways of seeing’\(^{24}\). We have also noted that organisations can be seen as dynamic human systems which are part of, and interact with, the wider social, cultural, economic and political context. The complexity of these systems can make change, whether internal or external to the organisation, difficult to predict with any certainty. However, this paper suggests that in order to be successful and effective, organisations not only need the capacity to analyse complexity but also to identify when unpredictable events and patterns might require actions to be adapted. Such responses should be guided by a clear vision and mission which can be lacking in CSOs\(^{25}\).

3.1 Sensing Emerging Events

There is a tension between encouraging CSOs to define a clear focus, objectives and intended results for their work, but yet be flexible enough to respond to the dynamic nature of change in human systems and the environment in which they operate.

Gaining an understanding of the environment or context has always been an integral part of strategic planning. However, the environment was often perceived as stable and predictable. More recently, the inherently unpredictable nature of the aid environment has been recognised, moving strategic planning away from ‘forecasting and plotting straight courses to a far more participative process which stresses internal factors such as values, consensus and collaboration’\(^{26}\). It is also clear that no easily understandable model can hope to capture the complexity of human change, since change takes place within a tangled web of relationships in which a number of different actors are the subjects of change at the same time. Change does not usually occur in convenient, sequential, logical steps, but is more characterised by meanderings back and forward between steps. Sometimes change is radical and other times more incremental.

Different levels of change can also cause different levels of discomfort\(^{27}\). The secret of an effective strategy may therefore be to respond to the complexities of change without meandering too far from the main objective.

\(^{24}\) Senge et al. 2004.
\(^{25}\) During a review carried out in 2004 of INTRAC consultancies this was identified as a critical capacity building issue for many CSOs.
\(^{26}\) Montuori 2003.
\(^{27}\) James 2003.
Mintzberg uses the concept of emergence to make an enlightening differentiation between planned and emergent strategies. Change brought about through emergence is not predictable because it is derived from the consequences of the tangled web of interactions that take place continuously within a system. Mintzberg recognises that, as a result, those strategies which are actually realised (implemented) by an organisation are rarely exactly what was originally intended (planned)\(^{28}\). Some elements of strategy emerge in response to the opportunities and threats that an organisation faces as it carries out its work. Some may even remain unrealised for whatever reason. These emergent properties do not respond to detailed plans, targeting or timetables because they arise from the dynamism of the interrelationships within the system, not from the nature of its constituent parts\(^{29}\).

The distinction between these different types of strategy can be useful because it obliges organisations to identify, and reflect upon, the various elements of emergent strategy (i.e. unplanned but implemented), deliberate strategy (i.e. planned and implemented) and unrealised strategy (i.e. planned but not implemented). The process of planned and emergent strategy development is illustrated in the figure below:

**Figure 2: Planned and Emergent Strategy\(^{30}\)**

A wider awareness of emerging events and patterns can help to avoid the ‘tunnel vision’ that afflicts many organisations and reduces their ability to see beyond what is expected and predetermined. However, developing analytical and adaptive capacities does raise the question of how CSOs can be supported to manage both planned and emergent strategies effectively. Emergence involves a new pattern which can only be identified if a scanning or ‘radar’ facility is used to pick up events as they occur. Problematically, emergence can be easier to identify in retrospect, making Mintzberg’s concepts difficult to implement in practice. Organisations also

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\(^{28}\) Britton 2005.

\(^{29}\) Morgan 2005.

\(^{30}\) Britton 2005.
tend to be better at predicting hypothetical futures, and perhaps even evaluating the past against these hypothetical futures, rather than noticing ‘what is happening now’\textsuperscript{31}. Developing the capacity of CSOs may involve finding a balance between developing the logic of strategic planning in parallel and a holistic understanding of the organisational systems and dynamics.

Recognising the need to enhance the capacity of CSOs to scan the environment and notice emerging events and patterns also raises wider issues. For example, can the current aid system, with its linear pursuit of pre-selected outcomes and tendency towards donor dominance, control and hierarchy, provide an enabling environment which is open and flexible enough to accommodate both planned and emergent strategies? This might require a significant shift both in mindsets and ways of working.

\begin{center}
\textit{Sensing Emerging Events: Section Summary}
\end{center}

\textit{Organisations need to be aware of the unpredictable way in which change occurs within a system, and to develop ways of identifying, or scanning for, new patterns as they occur and to judge which of these might require a response.}

\section*{3.2 Adjusting Actions}

An awareness of emergence can help to enable organisations to respond to open-ended change in a more holistic, dynamic and flexible way, drawing on intuition, experience, and experimentation to complement more traditional cause and effect analysis. However, the type of response depends on the type of issue or challenge identified.

\subsection*{3.2.1 Recognising the Challenge}

Within systems thinking it can be useful to distinguish between two categories of problems or challenges which may in turn require different types of response. These are:

- \textbf{Difficulties}: where the nature of the challenge, possible solutions, and the time and resource implications are relatively clear.
- \textbf{Messes}: where the definition of the challenge is unclear, the way forward seems uncertain and ambiguous, and the time and resource implications are unknown\textsuperscript{32}.

Within the aid system pressures often exist to define tangible results or outcomes from the outset as if all problems could be characterised as ‘difficulties’. In some

\textsuperscript{31} Vicky Cosstick (personal communication).
\textsuperscript{32} Chapman 2002.
situations this may be appropriate in the short term – for example, the challenge of delivering water supplies during an emergency situation could be addressed by using a reductionist, step-by-step approach. However, the nature of the systems in which development occurs is often complex and dynamic and therefore the challenges that arise are more likely to be categorised as ‘messes’. This is particularly true for more intangible development processes such as capacity building and empowerment where it is not always possible to define intended change with any certainty or to establish a clear link between cause and effect.

The ambiguous nature of ‘messes’ can be interpreted in many ways and from different perspectives. Discussion and consensus is therefore required to resolve this type of challenge without jumping to quick conclusions or to inappropriate actions (such as ‘papering over’ previous mistakes). Not recognising this could not only result in ‘messes’ remaining unresolved but may also lead to unintended consequences, whether positive or negative. In these situations an understanding of the complexity of systems may be useful in deciding how to respond to ‘messy’ challenges or problems.
3.2.2 Responding to Complexity

There is a growing interest in the theories of complex systems and the new possibilities these provide for innovation in organisations. These expand on systems thinking to explore the ways in which organisations can respond more effectively in their ever-changing and turbulent landscape, drawing on elements of organisational ecology, chaos, complexity and evolutionary theories. The strategic adaptation perspective adds to this by suggesting that organisations also have the power to influence and shape their environment. Complex Adaptive Systems can also help to understand the influence of complexity on organisations.

Organisations as Complex Adaptive Systems

A Complex Adaptive System is an open system, such as an ecosystem, immune system or social system, which is constantly adapting to its environment. As with organisms within a natural ecosystem, organisations can operate as open systems that respond to environmental changes and co-evolve with them in order to survive and make progress. The complexity arises from the multiple relationships and interactions within and beyond the system. From these interactions, regularities emerge and start to form patterns. This process of adaptation is mostly slow and incremental, but at certain times, environmental turbulence may lead to more radical organisational transformation. This evolutionary process can be influenced but not controlled. The range of interconnections and feedback loops make it difficult to predict the consequences of interventions in the system, leading to both intended and unintended consequences. In addition, as part of the system, an organisation can itself influence the dynamic and unpredictable nature of the system and environment through the consequences of the actions it takes.

Soft Systems Methodology (SSM) can also be used to analyse and understand problems using a complex systems approach.

Soft Systems Methodology using Rich Pictures

The Soft Systems Methodology has been used to establish learning processes to identify, analyse and understand complex problems.

'SSM aims to bring about improvement by activating the people involved in the situation in a learning cycle which is ideally never ending. The learning takes place through the iterative process of using systems concepts to reflect upon and debate perceptions of the real world, take action, and learn from change using systems concepts and models. It is taken as given that no objective and complete account of a problem situation can be provided.'

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33 See for example Stacey 1992 and Lissack and Gunz 1999.
34 Hall 2002.
35 See Olson and Eoyang 2001.
36 See for example Aldrich, in Hall 2002.
The SSM process begins when a problem situation has been identified. The participants involved can then use rich pictures\textsuperscript{39} to explore the issues and context and represent their different perspectives. Once a consensus has been agreed, participants can go on to identify the key themes, or ‘root definitions’, involved. On this basis, they construct a conceptual model of the system and determine the sequence of activities that would help to achieve the desired change. Defining clear conceptual models requires the ability to simplify complexity to a level which loses detail but maintains the essential connectedness. The use of locally appropriate proverbs, stories, metaphors or analogies may facilitate this\textsuperscript{40}. The overall SSM is illustrated in the diagram below\textsuperscript{41}. The simplified level is separated from the real world issues by a dashed line.

![Diagram of the SSM process]

Some experiences using SSM suggest that its main strength is to bring to the surface different perceptions of a problem and to structure these in a useful way. The openness of those involved to explore the diverse positions within the group can bring agreement about collective goals and about how the system itself works\textsuperscript{42}.

As with other living human systems, organisations have the potential to self-organise, develop temporary forms of leadership for specific purposes and create new structures and systems when needed\textsuperscript{43}. It has also been suggested that if groups within organisations are allowed to self-organise spontaneously, creative strategies may gradually develop as a result of the exchange of different perspectives and ideas. This can form the basis for making informed choices about how to adapt. Adaptation may therefore be triggered or shaped by:

\textsuperscript{39} See section 2.1.1 for more information about rich pictures and how they can be used to map a system.
\textsuperscript{40} See for example Malunga and James 2004, Crooks 2004, and Sterland 2005.
\textsuperscript{41} From Chapman 2002.
\textsuperscript{42} Chapman 2002 and Lynch 1997.
\textsuperscript{43} See for example Wheatley and Kellner-Rogers 1995 and Olson and Eoyang 2001.
• **increasing the connections between different individuals** across the organisation (rather than top-down control)

• **facilitating space for dynamic tension** between shared values and differences, between co-operation and competition, which can set the stage for adaptation and reshape organisational patterns

• **encouraging experimentation and risk-taking** while allowing for failure\(^\text{44}\).

Greater organisational effectiveness can be achieved through increased creativity and innovation in response to triggers for change, both internal and external to the system. In turn, organisational sustainability can be enhanced by the continuous interpretation of, and adjustment to, the complexity and dynamics of the system over time and at various levels\(^\text{45}\).

### 3.2.3 Moving Beyond Habitual Actions

While recognising that complexity can help organisations to respond appropriately, there is a tendency to base these actions on the habits of the past. This may be because there is a natural reticence to move beyond what is comfortable and familiar but also because ‘when any of us acts in a state of fear or anxiety our actions are likely to revert to what is most habitual: our most instinctual behaviours dominate, ultimately reducing us to the “fight-or-flight” programming\(^\text{46}\).’ Collective actions are no different\(^\text{47}\). Therefore, as conditions in the world change dramatically, many organisations find comfort in continuing to take the same kind of actions as usual. These reactions can cause us to discount interpretations and options that are different from those we know and trust, thus limiting the capacity of organisations to move towards a future that may be different from the past.

Taking ‘quick fix’ actions can also lead to ‘unintended side effects and new problems, leading to more quick fixes and more side effects\(^\text{48}\) while never creating the results that were anticipated. This is like addressing the symptom of a problem without ever looking for a deeper cause or fundamental solution, as is illustrated in the experiences of a human rights organisation in Malawi (see text box overleaf). However, it needs to be recognised that there can be a tension between promoting innovation and maintaining the status quo. Encouraging organisations to experiment and do things differently can be overwhelming when faced with a constant struggle simply to carry out basic activities. This may be especially true for

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\(^{44}\) Olson and Eoyang 2001.

\(^{45}\) Wilhelmson and Döös 2002.

\(^{46}\) See Praxis Note 17 for an example of how this approach has been applied to leadership development in Malawi.

\(^{47}\) Senge et al. 2004.

\(^{48}\) Senge et al. 2004.
small organisations with unstable funding sources and those in countries where the
civil society sector is relatively weak.

Moving Forward - a Human Rights Organisation in Malawi

A Human Rights Organisation (HRO) was established in 1993 to help the people of
Malawi to ‘know, claim and defend their rights’. In 2000 the HRO observed that
they were not making as much impact in their target area as they had in the past
and that the confidence and number of their donors had decreased drastically.

The director hired a consultant to help the organisation to ‘move forward’. The
consultant facilitated a process to help the HRO to develop a ‘world picture’ or an
image of what the organisation would look like in five years time. He encouraged
the HRO to contrast the environment (political, economic, socio-cultural and
technological) within which it was operating in 1993 with the current context. This
led to discussion about the implications of changes in the environment for the work
of the organisation and for its future. This analysis led the HRO to discover that:

- The real problems that needed to be addressed were not in the urban areas
  where their efforts were concentrated but in rural areas
- The information dissemination projects being implemented were no longer as
  important as before because many people knew about human rights. The
  challenge now was to translate their knowledge into practice
- They were working in too large a geographical area to make any significant
  impact

As a result of these discoveries the HRO:

- Changed its target area to concentrate on rural areas
- Moved beyond information dissemination projects to projects aimed at
  changing behaviour
- Reduced its geographical scope and concentrated on a few communities

The consultant helped the HRO to develop a ‘monitoring and learning system’ to
enable the organisation to ‘detect changes in its task and internal environment and
respond in time with the world picture as a benchmark’. Using the system they
regularly made adjustments as soon as they detected or anticipated any changes in
their environment. By 2002 the HRO regained the confidence of its donors and
obtained enough funding for five years. The human rights situation improved in the
communities in which they were working. Widows whose property had been
‘grabbed’ were able to get it back. Youth groups helped girls to avoid being forced
into early marriages. Many other human rights NGOs came to the communities in
question on ‘learning visits’.

49 Chiku Malunga, personal communication.
3.2.4 Linking to Organisational Learning

Learning is a developmental process that integrates thinking and doing. It provides a link between the past and the future, requiring us to look for meaning in our actions and giving purpose to our thoughts. Learning enriches what we do as individuals and collectively, and is central to organisational effectiveness, to developing the quality of our work and to organisational adaptability, innovation and sustainability\textsuperscript{50}.

The process of organisational analysis and adaptation that we propose in this paper is not separate from organisational learning but should be seen as integrally linked. However, in a process of analysis and adaptation the type of learning used can influence whether the organisation continues within pre-established frameworks and strategies or develops new ways of working. The concepts of single loop learning\textsuperscript{51}, double loop learning and now triple loop learning can help to explore this distinction.

<table>
<thead>
<tr>
<th>Table 1: The characteristics of single, double and triple loop learning\textsuperscript{52}</th>
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<tbody>
<tr>
<td><strong>Single Loop Learning</strong></td>
</tr>
<tr>
<td>Involves</td>
</tr>
<tr>
<td>▪ Apply existing rules/procedures</td>
</tr>
<tr>
<td>▪ Deal with symptoms of problems</td>
</tr>
<tr>
<td>▪ Pose ‘how?’ but not ‘why?’ questions</td>
</tr>
<tr>
<td>▪ Learn about the outcomes of an action</td>
</tr>
<tr>
<td>▪ Think ‘inside the box’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intended outcomes</th>
<th>More efficient ways of working</th>
<th>More effective ways of working</th>
<th>Renewed statement of core values and purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Improved application of rules/procedures</td>
<td>New knowledge and insights</td>
<td>Renewed identity and mission</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Improved rules and procedures</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Improved systems and strategies</td>
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</table>

For CSOs facing complex situations where the future is often ‘unknowable’, single-loop learning may have limited application because it is about ‘habitual ways of thinking, or continuing to see the world within the familiar categories we’re comfortable with\textsuperscript{53}. However, where organisations are struggling even to carry out core activities effectively, this type of learning may be the most appropriate. This is because it can allow them to develop more efficient ways of carrying out existing activities without overwhelming them with new areas of work.

\textsuperscript{50} Britton 2005.
\textsuperscript{51} Argyris and Schon 1978.
\textsuperscript{52} Britton 2005.
\textsuperscript{53} Senge et al. 2004.
Double and triple loop learning take a more systemic approach which can allow for the open-ended change and unpredictability that characterises development. They can deepen our awareness by reaching beyond superficial events and current circumstances to develop a more holistic understanding of our interactions with the social, economic, political and natural environment. In complex situations, where general frameworks cannot be applied to each event as it arises, effective learning can require a continuous process of observation and course correction, which means detecting small changes, adjusting actions and being aware of the feedback those actions elicit. However, double and triple loop learning take time and are more sophisticated processes which can encounter significant barriers. They do not fit easily with an organisational culture focused on tasks, agendas and outcomes. Organisations resistant to these types of learning therefore have ready excuses to avoid them, such as lack of time, resources and access to learning professionals to facilitate these processes.\textsuperscript{54}

Also, the questioning nature of double loop and triple loop learning, and the way they challenge strongly held positions and organisational power structures, can create resistance within an organisation because they involve changing mindsets and ‘surfacing and exploring learning behaviours and organisational defences’.\textsuperscript{55} For these reasons many organisations may deliberately discourage this type of learning (or at least make it difficult). In simple terms, people (usually managers) may avoid the organisational problems exposed by double loop and triple loop learning either by doing nothing (and hoping the problems go away), or ‘escaping into action’ which gives the appearance of change but leaves the real problem unsolved\textsuperscript{56}. Managers may also discourage such learning processes if they perceive criticism as threatening or if they feel uncomfortable about reducing their control of strategic direction.

Cultural and contextual factors can also significantly influence organisational learning. Understanding the culture is critically important because it cannot be assumed that learning will take place even when it appears that all the ‘right’ conditions exist. For example, the Cambodian organisation VBNK\textsuperscript{57} has faced challenges as a result of status issues in the culture which have created resistance to some learning opportunities, most importantly:

- Resistance to learn from participants’ experiences (in Cambodian culture the teacher is expected to know all and the student nothing).
- Perceived qualifications of trainers greatly influence participants’ attitudes towards learning.

\textsuperscript{54} Vicky Cosstick (personal communication).
\textsuperscript{55} Stacey 1992.
\textsuperscript{56} Britton 2005.
\textsuperscript{57} See forthcoming Praxis Note: ‘Organisational Learning Across Cultures’ edited by Jenny Pearson, Director, VNBK.
• Limited ability to transfer workshop learning into everyday work practices.
• Limited capacity to read the environment, identify new trends, and to respond flexibly to needs or develop new initiatives.

Being a learning organisation requires some degree of shared agreement about the nature and purpose of learning. Learning may itself be a skill that has to be acquired in a way that is grounded in its relevance to the host culture. Adaptation and innovation can also involve processes of unlearning – of consciously giving up on learning practices that, in many cases, have long been ineffective. This process of unlearning can be a far more difficult proposition than learning because it can involve changing engrained patterns of behaviour.

Integrating a deeper level of learning into the process of analysis and adaptation also raises the question of whether the current aid system, with its requirements for pre-selected outcomes based on generalised project frameworks, can provide an enabling environment where: 1) fallibility, uncertainty and risk taking are acceptable and 2) there is an openness for learning to lead to unplanned actions in response to the changing environment.

### Adjusting Actions: Section Summary

All organisations face complexity and uncertainty deriving from forces of change in their internal and external environments. Recognising this can enable organisations to respond more appropriately, moving beyond actions based on habits of the past while simultaneously learning to listen to the feedback that those actions elicit.

### 3.3 Adaptive Capacity: Experience from Practice

#### 3.3.1 Analytical and Adaptive Capacities in an International NGO

The Asia Region of the World Conservation Union (IUCN) is based in Bangkok and operates in 23 countries. It has nine country programmes and seven technical programmes in fields including: biodiversity; environmental economics; forests; marine and coastal; protected areas; water and wetlands; and environmental law. It is, in practice, a trans-national organisation with 445 staff members of which 82 per cent are located in country offices. Two of the key challenges for the IUCN Asia Region (AR) are the following:

• to be simultaneously decentralised and integrated, and
• to be able to respond to the rapid pace of events across the region.

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58 Personal communication with Peter Morgan.
Fast learning and adaptation are therefore essential for IUCN Asia Region’s effectiveness and even survival. As an organisation IUCN has responded to this by making systematic efforts across the range of its operations to build these capacities. The leadership function is strong at the top of the structure but encourages the emergence of staff throughout the organisation who can take initiatives and respond quickly. Staff at all levels are encouraged to develop new competencies. New ideas and reflection, including those that are disruptive or risky, are encouraged, and the space to express these is protected. The organisational structure is designed on a basis of team working and matrix management to encourage networking, connections, relationships and the flow of information. All staff, whatever their function or location, are encouraged to scan the horizon to get a sense of what is happening or what might happen.

The Asia Region also tries deliberately to destabilise itself from time to time to stimulate new patterns of action. As a result, it now seems to have entered into a ‘virtuous spiral’ - that is, cycles of effective capacity building, performance, client demand and organisational confidence which are mutually reinforcing and propel the organisation upwards and forwards. Three main insights from the AR experience are the following:

<table>
<thead>
<tr>
<th>Main insights from the experience of IUCN in the Asia Region</th>
</tr>
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<tbody>
<tr>
<td>1. Key capacities are not tacked or bolted on to the side of the organisation. They are not technical functions that exist independently of the rest of the system. They are, in reality, emergent properties of the system or organisation that come out of a series of complex interactions. Such capacities are an integral part of the organisation.</td>
</tr>
<tr>
<td>2. The IUCN Asia Region sees itself as a living human community as well as a performance achiever. It spends little time on formulating explicit strategies. But it consciously and continuously thinks about its own capacity and the best ways this can be proactively developed.</td>
</tr>
<tr>
<td>3. IUCN Asia Region does not rely heavily on funders for advice or technical assistance when it comes to capacity issues. It welcomes support and/or new approaches. But it sets its own course.</td>
</tr>
</tbody>
</table>
4 Implications for Capacity Building Practice

All organisations face complexity and uncertainty and, to some degree, analyse and adapt to forces for change within their environment. However, some do this more consciously and successfully than others. While existing capacity needs to be valued and supported, this paper suggests that strengthening analytical and adaptive capacities may help CSOs increase their effectiveness. To do so, these capacities should become institutionalised as part of the way things are done by the organisation according to its vision and values, rather than remain as individual capacities of staff members. This may be more about crafting and sustaining an organisation not just as a productive actor but also a human community. Different types of organisation may also need to use these capacities in different ways or to different degrees. Strengthening analytical and adaptive capacities can also be seen as an integral part of any capacity building process, for example through organisational development (OD) or leadership development, and not just as an outcome.

The theoretical considerations presented in this paper are helpful for conceptualising analytical and adaptive capacity. In this section we take this a step further by exploring how these concepts might be useful for putting theory into practice to strengthen the analytical and adaptive capacities of CSOs operating in developing and transitional countries. To do this we will:

- identify the analytical and adaptive capacities that might be most relevant for CSOs
- explore the factors which influence the development of these analytical and adaptive capacities

4.1 Key Analytical and Adaptive Capacities for CSOs

The concepts and tools described in this paper primarily originate from a Western context, from both the private and public sectors. It is therefore important to consider the extent to which they are useful for and applicable to strengthening the existing capacity of CSOs where:

- uncertainty and instability can put additional pressure on organisations to respond rapidly to the changing environment
- the level of access to, and the type of, education may not encourage critical thinking and reflective analysis
- local culture influences the organisation’s ways of working and shapes its conceptual understanding and experiences

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organisations may not have the resources to create the time and space for sharing experiences, or facilitating critical reflection and individual initiative

• the maturity and capacity of CSOs may differ considerably

Taking these into consideration we can summarise a number of key capacities which may be most relevant to CSOs:

1. **Strong focus on mission and values**: organisations that have a strong sense of identity based on a clear vision and explicit values can respond more confidently, appropriately and effectively to changing circumstances. Without this ‘anchor’, they may be overly influenced by the agendas of others or simply continue old strategies without questioning them. This may be particularly relevant in cultures with less tolerance of uncertainty\(^{60}\) where people may not feel comfortable thinking outside the box and being innovative and creative without the stabilising anchor provided by clear vision and values.

2. **Ability to map and scan the wider system**: organisations need to understand and map the dynamics and interrelationships of the system in which they operate. They also need to periodically ‘scan’ the system in a similar way to a radar to identify emerging opportunities, challenges or triggers for change. One relatively simple way of doing this is to use rich pictures, as was described in section 2.1.1. This process may be complicated where the boundaries of the wider system are difficult to define or are perceived differently by those involved in the mapping. Whether it leads to proactive adaptation will depend on the effectiveness of the organisation’s knowledge management systems, how the information produced is interpreted and whether it is fully integrated into planning processes\(^{61}\).

3. **Flexibility to revise organisational mental models**: organisations need to be flexible and open to new knowledge and innovation but may be stuck in existing ‘tried and tested’ ways of working or a narrow focus on problem-solving. This involves standing back to ask the question ‘why are things the way they are?’ In contexts where change is frequently perceived as negative, and maintaining status quo is seen as important, it may be difficult to get organisations to move out of their ‘comfort zones’ and adjust their mental models. On the other hand, in some contexts rules and routines may be approached in more flexible ways allowing more openness to change.

4. **Combining reductionist and systems thinking**: organisations that combine reductionist thinking with systems thinking may be able to gain a better understanding of the issue they want to address, and how it relates to the wider system. Many cultures do not share the need of Western organisations to reduce complex dynamics to what can be explained rationally. Combining cause and effect reasoning with holistic systems thinking may be more natural for

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\(^{60}\) The uncertainty dimension is one of the cultural dimensions in Hofstede's framework (see Hofstede 2003).

\(^{61}\) See Britton 2005 for more on organisational learning and knowledge management.
organisations in these contexts, although they may not explicitly think of it in this way. However, combining these two styles of thinking within one organisation may prove to be complex to manage in practice.

5. **Balancing planned and emergent strategies:** organisations that balance the more rigid strategic planning with organic and creative learning processes may be more open to allowing adaptive strategies to emerge. This involves the capacity to anticipate change rather than just reacting to it. However, many CSOs appear to adopt ways of working similar to Western models of strategic planning and management, rather than drawing on the less formalised and more emergent strategies that may prevail in their local cultures. In these cases, it may be beneficial to develop hybrid models which use strategic planning to provide structure or ‘logic’ to a programme but are also responsive to unanticipated or ‘emergent’ events.

In the following table we suggest how weak and strong analytical and adaptive capacities can influence the effectiveness of CSOs.

**Table 2: Comparison of weak and strong analytical and adaptive capacity**

<table>
<thead>
<tr>
<th>Weak Analytical &amp; Adaptive Capacity</th>
<th>Strong Analytical &amp; Adaptive Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Partial and Static Understanding:</strong> limits organisational members to focus on their own assignments, without understanding how they contribute to the work of the organisation, absorb information that is relevant to their work only, and perceive instability or uncertainty as negative</td>
<td><strong>Systemic and Dynamic Understanding:</strong> allows organisational members to see synergy between the different areas of work, and benefit from internal and external change to develop new ideas and complementing competencies that will support the work of their organisation and its interaction with the environment</td>
</tr>
<tr>
<td><strong>Short-Term Thinking:</strong> concentration on short term delivery and problem solution, with no clear strategic focus or consistent pursuit of the organisational mission</td>
<td><strong>Long-Term Thinking:</strong> projection of scenarios, and development of strategies for how the organisation should act in the future to achieve its mission</td>
</tr>
<tr>
<td><strong>Reactive Behaviour:</strong> lack of co-ordination and coherence when responding to stakeholder needs, may lead to diversification of activity, dispersion of resources, limited fit with core competencies, and low quality of delivery</td>
<td><strong>Proactive Behaviour:</strong> strategic analysis and adaptation compatible with organisational mission, core competencies, and stakeholder needs ensures co-ordinated and effective use and improvement of organisational capacity, as well as high quality of delivery</td>
</tr>
</tbody>
</table>

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62 See Praxis Notes 1–4 by Terry Jackson.
<table>
<thead>
<tr>
<th>Rigid Organisation:</th>
<th>Flexible Organisation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>reinforcement of existing relationships and structures, reproduction of routines and continuation of habitual ways of thinking and working</td>
<td>members engage in evolving relationships, continuously review and improve their ways of working, and generate creative and innovative responses to rapid internal or external change through spontaneous self-organisation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Struggle for Survival:</th>
<th>Empowered Civil Society Actor:</th>
</tr>
</thead>
<tbody>
<tr>
<td>the organisation’s credibility deteriorates, as it is caught in its day-to-day struggle to survive, unable to renew its resources and competencies, or effect change in the society of which it is part</td>
<td>the organisation gains legitimacy, as it engages confidently and actively in social transformation, with a strong sense of purpose and identity</td>
</tr>
</tbody>
</table>

### 4.2 Factors Influencing the Development of Capacity

While there is little practical experience of capacity building approaches which specifically aim to strengthen organisational analysis and adaptation, we can suggest that there are both enabling and constraining factors which may influence the development of these capacities. The extent to which analytical and adaptive capacities are influenced by these factors may differ between cultures and contexts. These factors are summarised in the diagram below, and then briefly described.

<table>
<thead>
<tr>
<th><strong>Enabling Factors</strong></th>
<th><strong>Constraining Factors</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexible space for experimentation</td>
<td>Controlled hierarchical environment</td>
</tr>
<tr>
<td>Supportive leadership</td>
<td>Restrictive leadership</td>
</tr>
<tr>
<td>Dynamic interaction within and between groups</td>
<td>Static groups operating in isolation</td>
</tr>
<tr>
<td>Horizontal communication and co-ordination</td>
<td>Limited vertical ‘top down’ communication</td>
</tr>
<tr>
<td>Locally developed conceptual models</td>
<td>Imposition or uncritical acceptance of standardised models</td>
</tr>
<tr>
<td>Supportive donor environment</td>
<td>Rigid donor environment</td>
</tr>
</tbody>
</table>

**Strong Analytical and Adaptive Capacities**
Flexible Space for Experimentation:
Developing relationships of trust both between individuals and groups within the organisation, and between the organisation and its stakeholders, is key to enabling flexible ways of working which promote the generation of ideas and initiatives. This requires creating the space (both in terms of time and resources) for learning which encourages experimentation and risk-taking. Creating specific collective spaces, such as action learning sets or communities of practice, whether formally or informally can support these processes.

Supportive Leadership:
The role of leadership is central. Leaders may need to let go of some control, stimulate collective analytical and adaptive processes, and include staff more in the decision-making processes. Leaders also need to encourage staff to express their view, take risks without fear of failure and act upon relevant ideas. Effective leaders are captivated by learning. They are constantly on the lookout for new ways to enhance their ability to learn. A study of top NGO leaders in South Asia revealed that they ‘had a fascination with knowledge and learning ... What has been striking has been the ability of their founder leaders to change and adapt’. Rather than wait until they are forced to change by circumstance, effective leaders change ahead of time.

Dynamic Group Interaction:
In the complex situations which characterise most systems, no one individual is likely to possess a complete understanding of that system and its challenges. Developing group interactions within an organisation can combine different perspectives and draw on a wider knowledge base to define proactive responses. Triggered by perceived needs for adaptation or innovation, groupings may form in which organisational members adopt different roles and functions to serve a particular purpose for a limited period of time. If no relevant groups are in place, this may lead to the organic formation of loosely coupled structures.

Horizontal Communication and Co-ordination
Processes of collective analysis frequently take place in isolated groups within the organisation, and may not lead to proactive organisational adaptation. Communication and co-ordination mechanisms are therefore important for linking analysis to effective adaptation. In hierarchical organisations with top down management, formal co-ordination mechanisms and communication channels may be relatively easy to manage. However, the decision-makers at the top may not have access to more informal information, or stimulate creative ideas and innovative

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63 Action learning sets take place in small groups that meet on a regular basis to discuss issues of mutual importance. They focus on one topic at a time, and are designed to fulfil the specific needs of their members.
64 Hailey and James 2002.
65 James 2003.

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initiatives undertaken through horizontal interaction between staff. This suggests that it is not enough to build the analytical and adaptive capacity of individual staff members. It is also important to ensure that mechanisms are in place which allow for information to be shared and collectively analysed in a co-ordinated way, such as communities of practice or action learning sets.

- **Locally Developed Conceptual Models**

  Many of the concepts and methods used by donors are not based on local needs. However, many local CSOs are expected to apply these methods as part of funding requirements despite the methodological difficulties they might face, or the fact that the approaches do not correspond to their local logic or ways of working\(^{67}\). These approaches may not even be implemented according to donor expectations, since the local organisation may interpret the concepts based on its own mental model, rather than that of the donors. Developing the capacity of CSOs to capture and simplify complexity without losing an understanding of the interconnectedness and dynamics of the system may help them to develop a more consensual conceptual basis for a programme with their stakeholders. The use of locally appropriate proverbs, stories, metaphors or analogies may facilitate this\(^{68}\).

- **Supportive Donor Environment:**

  Donors could play a significant role in creating an enabling environment for CSOs to integrate processes of analysis and adaptation which involve a deeper level of learning in their ways of working. For this to improve organisational effectiveness, donors may need to reduce their requirements for pre-selected outcomes based on relatively rigid project frameworks and encourage more space for learning and flexibility to adjust actions. This may involve directly funding experimental activities, promoting ‘innovation zones’ which encourage some risk-taking and/or allowing for more flexibility to adjust actions as projects progress.

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\(^{67}\) This was highlighted as a critical capacity building issue by an INTRAC review of consultancies carried out in 2004.

\(^{68}\) See for example Praxis Notes 6 (Malunga 2004), 7 (Crooks 2004), and 9 (Sterland 2005)
5 Concluding Remarks and Next Steps

A variety of models, frameworks and practical tools can be used during a process of building the capacity of CSOs to analyse and adapt appropriately to their complex environments. These provide some thoughts about how organisational capacity building can move beyond a focus on technical and management capacities to look more holistically at capacity development. However, it is also clear that the key to building analytical and adaptive capacity is not so much in the frameworks and tools themselves but the way in which they are applied. It is also clear that many questions and challenges remain in relation to putting the concepts and approaches presented in this paper into practice. These include:

- What enables some organisations in rapidly changing environments to perceive and respond more effectively to triggers for change than others?
- Are there effective and appropriate ways of mapping and scanning the environment?
- What conditions enhance and constrain the development of analytical and adaptive capacity both at individual and organisational levels?
- Is it possible for CSOs to manage both reductionist and systems thinking? How could this be supported?
- What capacities would CSOs need to develop in order to plan effectively whilst also being open to emergent opportunities? Are these appropriate in situations where organisations struggle even to carry out core activities?
- How can organisations be supported to ensure a ‘safe’ enabling environment for critical reflection, experimentation and risk-taking?
- How can the transition from organisational analysis to adaptation be facilitated?
- Can solutions be developed which combine both generic and adaptive elements which respond to historical, political, economic, cultural and social contexts and the way that these change over time?
- How can donors be encouraged to look beyond the linear pursuit of pre-selected outcomes and allow flexibility for both planned and emergent strategies?
- How can monitoring, evaluation and impact assessment methodologies be used to measure the development of analytical and adaptive capacities and contribute to organisational effectiveness?

It is hoped that the lessons shared by practitioners in the field will gradually produce some of the answers – and raise other critical questions. The Praxis Programme aims to engage with a wide range of civil society support providers and researchers and provide a space for mutual learning from experiences. In particular, Praxis believes that local practitioners in developing and transitional countries have a key part to play in generating new ideas and approaches.
If you would like to engage in this process or have any further questions, please visit the INTRAC website or contact us via e-mail or the address below. Please also circulate this Praxis Paper within your networks and especially to those who do not have easy access to such information or the Internet.

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References


Building Analytical and Adaptive Capacities for Organisational Effectiveness

By Mia Sorgenfrei and Rebecca Wrigley

The complexity of the constantly changing environment in which civil society organisations (CSOs) operate has significant implications for their effectiveness. Internal and external pressures challenge their organisational identity and ability to achieve their mission, particularly where rapid change processes are triggered by contextual influences, whether negative (such as HIV/AIDS or civil war), or positive (such as increased donor funding).

The capacity of CSOs to analyse and understand their internal and external environment and adapt their strategies to new conditions can help them to respond appropriately to these challenges. However, some do this more consciously and successfully than others. This paper suggests that by facilitating an understanding of analytical and adaptive capacities, and how they can be strengthened, we may help CSOs increase their effectiveness. It offers a cross-disciplinary review of current thinking about analytical and adaptive capacity, drawing on literature from fields such as organisational learning and change, strategic management, systems thinking and complexity theory. It then proposes practical considerations which may guide future efforts to develop the analytical and adaptive capacities of CSOs.

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