

Chapter 4

Community Capacity Building and the Environment: Sustainable Development and Environmental Justice*

by

Maria Adebowale, Director, Capacity Global, London, United Kingdom
and Lovleen Bhullar, Researcher

Community capacity building in the area of the environment is an area of growing interest. The recognition that environmental ills are often confronted by those from the most vulnerable parts of society, such as the poor and migrant communities, has led to increased demands for environmental justice within the framework of sustainable development. Beginning with a discussion of the ideas of sustainable development and environmental justice, the chapter then goes on to explore the role and contribution of community capacity building within these frameworks. Utilising case studies from Europe, the Americas and Australasia, this chapter identifies key determinants for successful community capacity building in the environmental sector.

* The authors of this chapter would like to thank Emma Clarence, Policy Analyst at the OECD, for her assistance, Ady Carrera who contributed to the Mexican case study, with information received from Karen Nichols and Ana Zúñiga of Diageo, and Jo Knight from ZeroWaste New Zealand for the information provided.

Introduction

Community capacity building, as is evident from the previous chapters, has a critical contribution to make to enabling and empowering local communities. Such potential should not be overlooked in the area of the environment. Indeed, understanding capacity building and its effectiveness is crucial to tackling environmental inequalities. This chapter examines the role of community capacity building and the contribution it can make to fostering sustainable development, and to the wider idea of environmental justice. Drawing on examples from Europe, the Americas and Australasia, the diversity of approaches to addressing environmental inequalities and promoting environmental justice is outlined before a number of key elements of effective community capacity building around environmental justice are highlighted.

Sustainable development

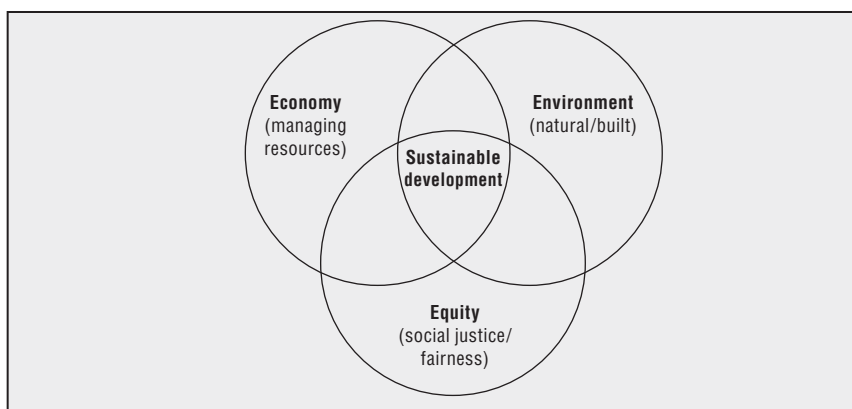
Gro Harlem Brundtland's now iconic definition of sustainable development – “development that meets the needs of the present without compromising the needs of future generations to meet their own needs” – was not about saving the environment only for the sake of the environment. Rather, it was part of an economic and social justice strategy for development which seeks to balance environmental, economic and social benefits. The definition first appeared in the 1987 World Commission on Environment and Development overview, *Our Common Future*, which was “a global agenda for change” (Brundtland, 1987).

The concept of sustainable development was developed as a response to tackling environmental degradation, social injustice and economic inequalities. Figure 4.1 (below) is the traditional visual tool to illustrate this nexus between the economy, environment and equity.

The Brundtland Report has played an important role in shaping the theoretical understanding of capacity building as part of social and environmental justice strategies. Emphasising that in order to improve the quality of life for present and future generations sustainable development must be pursued, *Our Common Future* also recognises the importance and challenge of supporting vulnerable communities. The fact that socially and economically excluded people were least likely to access “environmental goods” – clean water, unpolluted land – and most likely to receive “environmental bads” (for example, air pollution, desertification) has been well recognised globally. Unpacking these environmental inequalities or environmental injustices is crucial to improving these people's

quality of life. At the heart of the solution is the need to support and empower such communities. In practice, this means providing power through political development and participation, and, with regard to capacity building, this means concentrating on providing accessible information, participative decision-making processes, and supportive legislative and political structures.

Figure 4.1. **The intersecting spheres of sustainable development**



Although there are many definitions of sustainable development, which in turn have a different emphasis or focus on what environmental development is and how it is manifested, in many ways the diversity of definitions allows the flexibility that different regions, countries and civil society require. Despite such variations there are key themes and concepts that are reflected everywhere. These relate to prioritising the needs of the poor and developing capacity building initiatives (see Table 4.1).

Table 4.1. **Key themes and principles of sustainable development for capacity building**

Issue	Sustainable Development Response
Key principles	<ul style="list-style-type: none"> • The poor have the right to have their needs met first. • Development should have equal economic, environment and social benefits.
Key capacity building themes	<ul style="list-style-type: none"> • Promote environmental governance (such as Agenda 21 – outlined below). • Support equitable trade. • Transfer technology, information, finance and training. • Manage natural resources equitably.

There are a number of social and environmental challenges that have a community capacity building dimension, including climate change, desertification, flooding, marine and coastal degradation, poverty, health inequalities, unsustainable consumption patterns, discrimination, and the

failure to adequately enforce laws. All of these issues have a major impact on disadvantaged communities. Weidner (2002) noted that the issues are further complicated by which actors are involved and the context in which they operate. Effectively, dealing with environmental challenges and their potential complexities is heavily influenced by mechanisms, both the potential and capacity to support community level participation within environmental decision-making processes, and the systems (legislative and policy) that enforce or support community voices.

Environmental justice

Environmental ills which impact disproportionately on socially and economically excluded communities and groups have been, and are being, challenged by the environmental justice movement which seeks to empower the disenfranchised. Capacity building provides communities with the opportunity to access resources and expertise in order to challenge environmental decisions and it has the potential to make a positive impact on the lives of socially excluded communities. A clearer understanding of environmental justice movements, including the actors and the resources used to mobilise and enhance participation, could be used as a political and procedural tool for community capacity building.

The narrative of equality and justice within the context of environmental justice often refers to the equitable share of the environment (built and natural) of all humans, and the inequitable impact of environmental ills, such as pollution, on predominately vulnerable groups or communities such as the poor, minority groups, indigenous peoples, and women and children. As such, environmental equality is closely related to discussions surrounding the concepts of “ecological debt” and “ecological footprints” both of which are concerned with who benefits from, and who pays for, the environment and its degradation (McClaren, 2003). Furthermore, it is clear that there are strong links between environmental justice and ideas of sustainable development. As the Brundtland Report highlighted, the idea of sustainable development is based on the premise that environmental degradation is a result of human activity, but more specifically the activities of the affluent rather than the poor. Dealing with this inequitable impact is seen as crucial to increasing environmental standards, improving equitable shares of environmental resources, alleviating poverty and strengthening the democratic process.

A review of environmental justice in the United States suggests that environmental equality is central to notions of environmental justice. This is illustrated by the general definition of environmental justice as the right for any one group, in particular minority and low income populations, not to suffer the disproportionately high and adverse health or environmental effects of activities, policies and programmes. The environmental justice

movement began as part of the civil rights movement in the United States of America, culminating in a direct environmental equity movement in the 1980s and 1990s. The main premise of this movement is to achieve equitable distribution of environmental risks across “racial”/ethnic and social lines. Such support developed out of concerns, backed by research, that hazardous installations, such as toxic waste dumps and polluting factories, were predominantly sited in areas where most of the population were poor and from ethnic minority groups. As a result, minority neighbourhoods were suffering disproportionately from the impact of industrial and hazardous waste facilities. In 1992, as a direct response to calls for laws on environmental equity, the US Environmental Protection Agency created an Office of Environmental Justice. Despite this, significant problems continue to be in evidence: a report by Bullard *et al.* (2007) notes that Black Americans are still 79% more likely to live in neighbourhoods where industrial pollution is alleged to cause potential health dangers and that residents in these neighbourhoods are poorer, less educated and more often unemployed than those elsewhere in the US.

Community capacity building and the environment

The issue of environmental equality and justice is reflected in global and national social justice agendas. Whilst the challenges may vary it remains that around the world ideas of environmental justice have been consolidated around the key issues of access to natural resources and participation in decision making on environmental issues. Capacity building is clearly an important tool in meeting these challenges.

Capacity building within the context of environmental equalities has been at the root of sustainable development since at least the early 1970s. Indeed, from the 1972 Stockholm Conference on the Environment, held by the United Nations, there has been a marked understanding that environmental protection has to go hand in hand with social and economic development. This has been more fully articulated in subsequent meetings and increasingly accompanied by an explicit consideration of the role of capacity building.

Agenda 21

The 1992 United Nations Conference on Environment and Development (the Rio Conference) formally recognised the importance of capacity building in the environmental context. The conference adopted Agenda 21 as a framework for action on environment and development. It included a broad description of the scope of capacity building:

Specifically, capacity building encompasses the country’s human, scientific, technological, organisational, institutional and resource capabilities. A

fundamental goal of capacity building is to enhance the ability to evaluate and address the crucial questions related to policy choices and modes of implementation among development options, based on an understanding of environmental potentials and limits and of needs as perceived by the people of the country concerned. (UNCED 1992)

In addition to Agenda 21, the three multilateral environmental agreements – the *Convention on Biological Diversity*, the *United Nations Framework Convention on Climate Change* and *United Nations Convention to Combat Desertification* which were opened for signature at the Rio Conference, also included explicit capacity building provisions.

The Agenda 21 priority of building capacity to assist developing countries to obtain their sustainable development goals was reconfirmed at the 2002 World Summit on Sustainable Development. The Johannesburg Plan of Implementation included over 35 references to capacity building and called on the United Nations Environment Programme and other UN agencies to “strengthen their contribution to sustainable development programmes and the implementation of Agenda 21 at all levels, particularly in the area of promoting capacity building”. (UN 2002)

As suggested by the World Resource Institute (2005), the benefits that can be directly derived to the poor can significantly impact on their income. World Health Organisation findings also suggest that a degraded environment will have an immediate impact on the poor or vulnerable. There has been growing recognition of the need to develop their capacity to access information, participate in, and contribute to, decision-making processes (DFID, 2002). For instance, in May 1991, the participants at the first United Nations Development Program (UNDP) symposium, *A Strategy for Water Sector Capacity Building*, emphasised that capacity building is a long-term, continuing process, in which all stakeholders should participate. They also identified the following three key components of capacity building:

1. Creation of enabling environments including appropriate policy, legal and regulatory frameworks.
2. Institutional development, including community participation (women in particular).
3. Human resource development and the strengthening of managerial systems (UNDP, n.d.).

Whilst the exhortations for capacity building had been growing, a global community capacity building strategy emerged following the preparation of a report by UN Commission on Sustainable Development (CSD). By acknowledging the need for improved capacity in the UN's relationships with communities, the report alluded to a participatory model of community capacity building

(McGinty, 2002). This was reflected in the 1996 report of the CSD, which described capacity building as:

“the process and means through which national Governments and local communities develop the necessary skills and expertise to manage their environment and natural resources in a sustainable manner within their daily activities. The main ideas behind this concept are the following:

- strengthening peoples’ capacity to achieve sustainable livelihoods;
- a cross-sectoral multidisciplinary approach to planning and implementation;
- emphasis on organisational and technological change and innovation;
- emphasis on the need to build social capital (i.e. voluntary forms of social regulation) through experimentation and learning;
- emphasis on developing the skills and performance of both individuals and institutions” (UNCSD, 1996).

This strategy partially facilitated an institutional response that emphasised a view of community capacity building which included bottom-up and participatory approaches.

The effectiveness of a capacity building programme depends on its ability to harness that potential for the long-term achievement of results (Ohiorhenuan and Wunker, 1995; Ocean Studies Board, 2008). Community capacity building to tackle environmental issues must also be informed by a three-dimensional framework which recognises the social and economic aspects of sustainable development. Therefore, the success of a capacity building project can be measured by the resulting growth of environmental, social and economic capital within the community.

It is crucial to understand capacity building as an endogenous process where external agencies, such as governments, civil society and businesses, act merely as a catalyst, facilitator or knowledge broker for the communities (Ohiorhenuan and Wunker, 1995). Some capacity building efforts have been criticised due to their failure to recognise the pre-existing capacity of communities. The ultimate goal of a capacity building initiative should be the development of local leadership and increased stakeholder engagement and control over programme management (Gibbon *et al.*, 2002). The empowerment of communities will further allow them to build networks and partnerships, which will enhance their ability to ensure the sustainability of decisions that influence their quality of life.

A Community-Based Participatory Research study (CBPR) was developed by academic researchers to look at environmental health and ways in which participatory research within communities might tackle health impacts caused by environmental injustices (Minkler *et al.*, 2006). Focusing on four partnerships in the United States, the study developed an overall model

to examine ten areas or “dimensions” of community capacity building (Freudenberg, 2004). These included: leadership, participation, skills, resources, social and organisational network, community identity, and community understanding of its history, its level of power, shared values and critical reflection.

The study provided a useful review of dimensions of community-based participatory research. Key dimensions of community capacity identified were:

- strong community leadership;
- participation;
- skills and resources;
- ability to form and maintain networks; and
- shared values.

The importance of a strong community leader in developing partnerships was highlighted. Not only did strong leaders contribute to the perception of them, and their previous experience, but it also granted them authority in their dealings with policy makers. Linked to the importance of strong leadership is participation. Additionally, the role of understanding and using research findings was perceived as a catalyst for action, allowing the participants to increase their ability to make informed decisions that are most likely to reflect community values. As the study was focused on environmental justice and capacity building it is perhaps understandable that “critical facilitating factors” (Minkler *et al.*, 2006), including leadership, participation, skills, resources, social and organisational networks, and an understanding of the demands and challenges of working in partnership, can be identified.

The study also highlights the potential to galvanise community engagement by employing community members to transfer information and create a strong base for community action. The potential to build environmental action through the politicisation of communities and the articulation of demands for social justice and equality rather than traditional environmental conservation principles can also be seen. This is particularly important for community or community members who do not see themselves as environmentalists and are therefore put off the idea of taking “environmental action”.

In the following section community capacity building in the context of specific environmental issues – climate change, pollution and natural resource management – will be considered. All of these issues have substantial social and economic ramifications. The case studies highlight different aspects of community capacity building. For instance, in some cases the provision of information on the local impacts of climate change has encouraged community action. Indeed, a feature of many of the case studies below is the

way in which the participation of communities, which have been previously excluded from the environmental decision-making process, can significantly influence the quality of the outcomes and make them more relevant to their needs (Downing, 2001).

Effective environmental community capacity building: Case studies

Overview

The principles and definitions for capacity building and environmental justice provide a useful framework for evaluating the effectiveness of both top-down, but more particularly bottom-up, examples of community capacity building. This section examines community capacity building in terms of policy and practice with case studies from countries in both western and eastern Europe, the Americas (the United States of America, Canada and Mexico) and Australasia (Australia and New Zealand). They have been chosen to illustrate the diversity of approaches to capacity building in the context of environmental challenges, in the main for vulnerable communities. Many of the case studies have been part of finite projects, lasting from less than a year to over a decade, and they have taken place at different times over the last seven years. Some of the projects from which the case studies originate have ended and others have developed into new initiatives.

In essence the case studies are a tool to reflect on the approaches used to support and enable poorer communities to deal with environmental problems. They also provide a perspective on the environmental context in which community capacity building can have an impact and the potential opportunities raised for, and the main barriers to, community empowerment in relation to environmental decision making and participation.

The case study overviews are also referenced by the use of effective tools for community capacity building and environmental governance which are illustrated in Table 4.2 below (Adebowale, 2002). The table is based on the environmental justice organisation, Capacity Global's, study of the most successful attempts at creating environmental justice. Such successes have built the capacity of vulnerable groups through funding, the provision of information, and the removal of barriers to participating in decision making by creating avenues for communities to challenge and influence traditional top-down decision-making processes.

Europe

The size of Europe, and the environmental diversity which it encompasses, make it unsurprising that there are numerous and significant environmental challenges. The fourth assessment of Europe's environment identifies several key

Table 4.2. Effective tools for community capacity building and environmental governance

Access to information and resources	<ul style="list-style-type: none"> • Create information exchanges between, from and to vulnerable communities on the issues of concern. • Ensure this is in a format that is best understood by the particular group. • Create dialogue forums in which vulnerable communities feel confident to speak and to be heard. • Assess regularly with vulnerable groups the specific impact of environmental degradation and the environmental management systems in use. • Develop and amend management processes in accordance with information and concerns raised in dialogue with vulnerable communities. • Consider the ability to develop economic and social capital and to what extent it already has been developed.
Access to participation and decision making	<ul style="list-style-type: none"> • Ask what might be acting as a barrier to participating in environmental management. • Work with the community or group to find ways of tackling these barriers. • Offer resources, such as travel, accommodation, tools, child care and literacy classes, where possible, to aid participation. • Provide user-friendly management methods and question how user-friendly they actually are. • Allow for self-management based on a framework agreed by the group or community.
Access to justice and political influence	<ul style="list-style-type: none"> • Work with groups or communities to tackle discriminatory decisions. • Provide access to legal and scientific resources. • Campaign to stop discriminatory practice or behaviour. • Raise awareness of legal, political and administrative barriers.

environmental challenges: depletion and contamination of natural resources due to patterns of production and consumption, environment related health concerns (issues related to air quality, inland waters, soil, and hazardous chemicals), exacerbation of extreme weather events due to climate change and associated impacts on socio-economic activities, biodiversity loss, overuse of marine resources and pressures on coastal environments (European Environmental Agency, 2007). At the same time, differences can be identified between eastern and western Europe. For instance, transport energy consumption and the resulting per capita carbon dioxide emissions are higher in western Europe but the emissions per capita are lower, whereas in eastern Europe pressure on natural resources and high levels of industrial pollution in the region has served to underline the need for resource management. What is clear is that the expected consequences of environmental degradation and climate change are becoming increasingly evident across Europe.

The following case studies have been used only to provide some insights into how community capacity building has been used to address flooding, resource management and hazardous waste in Europe.

England: Coastal Futures – the Humber community project

The Humber Community Project “Coastal Futures” worked with communities living in coastal areas of the Humber estuary, a low-lying area of the north-east of England with a high risk of flooding, home to over 300 000 people. The

project was established by four partner organisations: the UK central government's Department for Environment, Food and Rural Affairs (Defra); the Environment Agency and Natural England (both non-departmental public bodies of Defra); and, the Royal Society for the Protection of Birds (RSPB, a non-governmental organisation) in 2005 and funded for a three year period. The objective of Coastal Futures was to work with those communities geographically most at risk from flooding and affected by the Humber Flood Risk Management Strategy to alter current sea defences in the region. It worked with communities to clarify the issues around flood management and changes to flood defences and to help them gain an understanding of the inability of existing sea defences to stop flooding indefinitely. Working with communities the project sought to transfer knowledge on three main issues: i) the length of time flood defences could stop or limit flooding; ii) how vital habitats could be effectively managed; and, iii) how solutions could be found that explored new ways of managing flood risk for both people and property.

The project started by hiring a project officer to work with at-risk communities, in particular agricultural workers or farmers whose land was most likely to be lost through managed realignment, a process whereby flood defences are moved inland allowing old barriers to be breached by allowing the tide to move in and out, eventually creating new habitat areas. While the success of the programme seems to be the support it received from key partners in civil society and government, one of its most fruitful assets was its independence and the time invested by the project officer to work with communities, individual households and parish councils, and with local government. The project also offered key tools for developing the communities' capacity to participate in the project, including the transfer of information via its website, establishing information sessions with individual community groups and events, such as family days.

The project finished at the end of 2008 and initial feedback suggests that they have been able to inform some of the communities they wished to engage with and have helped the communities to put forward their views on the proposed strategy, including problems and potential solutions. This has been demonstrated by the number of individuals attending their events, the numbers visiting their website and community input into the strategy. The events and information sessions allowed households and farm landholders in the flood areas to discuss their concerns about flood risk, to gain more information on managed realignment and to challenge such a solution.

The project created the opportunities for communities to access information and resources by establishing forms of information exchange on issues such as climate change and the impact of flooding on land realignment choices for at-risk communities in the Humber. However, the Humber Coastal Futures Project was ultimately limited by its remit – that is, to support communities

who would be affected by the Humber Flood Risk Management strategy being implemented by the Environment Agency. The at-risk communities were not able to exert political influence in changing a decision already made by central government and government agencies. As the decision had already been made on the need for land realignment it immediately limited the ability to reflect or take on alternative solutions. In addition, the need for the project to assist in establishing agreement as to which areas should be chosen for realignment was likely to create competition between landowners as to whose land should be realigned. The limited choice of substitute land could further fuel such competition. Ultimately the project, despite using capacity building tools, operated in a political context that was likely to support a “not in my backyard” culture as opposed to one that develops cohesive community empowerment.

Romania: Unitarian Universalist Partner Church Council – capacity building and flooding in Transylvania

In August 2005 flash flooding devastated fourteen villages in the Nyiko Valley in Transylvania. The floods, in which three people died, destroyed homes, and damaged the small service industries and agricultural sector upon which the valley was economically reliant. Following the flooding, communities from all the valleys self-organised to rebuild their communities. The self-established Nyiko Valley Flood Relief and Rehabilitation Committee (Relief Committee) agreed that their main goal was to get residents to discuss their problems and share information, believing that they were the best experts to deliver community action on localised flooding. Their other goal was to identify and prioritise needs. They agreed that the solution was to form an action plan on the basis of the participatory approach of the Unitarian Church of Transylvania. Two villages, Bencéd and Székelyszentmihály, were involved in this project.

The Unitarian Universalist Partner Church Council (UUPCC) is a not-for-profit, incorporated civil society organisation and is a partner of the Unitarian Universalist Association. The Council represents over “1000 liberal religious congregations” with a remit to support and engage congregational communities to promote human rights and justice, and economic fairness. The work of the Council and the Association is assisted through local level networks which operate in the countries it works in to encourage capacity building and the transfer of knowledge.

The Council’s work in Romania focused on delivering a capacity building project in the flood affected areas in Transylvania with a strong engagement with sustainable development issues. It believes that partnership with communities “transforms from charitable giving to capacity building” (UUPCC, 2006). In essence, the Council recognises that the transfer of power provides economic, social and environmental benefits enabling sustainable development changes.

Initially the work concentrated on auditing damage done by the flooding. Using discussion and sketch maps the extent of the damage was reviewed and the areas most in need of structural improvement and rehabilitation were highlighted. With the implementation of the UUPCC's strongly participatory community capacity building approach the relief committee developed an action plan not only to address these issues but also to consider for the future for the Nyiko Valley beyond reactive rehabilitation. Whilst there were tensions in the process, notably in discussions around large projects (such as water and sewerage projects), through discussion the communities found themselves able to identify potential solutions. The project communicated a range of positive community participation impacts, including the development of skills within the community to tackle not only the immediate problem of flooding in the valley but to raise resources for economic and social projects for the future.

Recognising the need for communities to work together was an important outcome of the project. A review of the findings of the project highlight that the community recognised that they were more effective if they operated collectively with other villages in the valley. There were, however, a number of underlying issues which make it difficult to assess the ability of the most vulnerable members of the communities in the valleys to fully benefit from participating in the decision-making process. Whilst attendance grew over the three nights, particularly amongst women, there is little evidence provided as to whether the Council and the relief committee had sought to include the most vulnerable households in the communities. Finally, whilst the project illustrates how the communities were able to self-organise the development of action plans, it was noted that they lacked the capacity, particularly in the area of leadership, to move the process forward. There was a need for training to help individuals develop the necessary skills to enable leaders within the community to "learn skills of contracting, proposal writing, project management, and group decision making" (Ford et al., 2006). The potential over-reliance on external help could be a significant barrier to developing self-organised and managed strategic frameworks. This could lead to a reduction in the ability of the communities to gain political capital through the strategic development of clear and measurable aims, objectives and action plans.

Australasia (Australia and New Zealand)

Australia

Australia's third independent report into various aspects of Australia's environment, the *State of the Environment* (SoE) report in 2006, covered the period from 2001-2006. Its key findings highlighted climate variability and climate change, lack of accurate, nationally consistent environmental data, and the intensification of pressures from human activities, including increasing

resource consumption, as key environmental issues of concern. The progress made in Australia's environmental performance from the second report was attributed to the increased co-operation in environmental stewardship between governments and the community, including indigenous communities.

In recent years, community capacity building in the environmental context has become the focus of public policies and programmes addressing pollution and climate change issues as well as natural resource management. Natural Resource Management Plans (NRMP) are an integral part of Australia's approach to sustainable development. Each of the 56 regions into which Australia has been divided are required to produce a NRMP which has been prepared with the involvement of a wide range of public, private and third sector actors, and local communities. Community capacity building is an activity integral to the development of the Plans.

North Central Catchment Management Area – Indigenous peoples involvement in land and water management

Even before the Australian federal government had introduced NRMPs, the State of Victoria had been seeking to address pressing environmental issues. Legislation such as the 1989 Water Act and the 1994 Catchment Land Protection Act led to the establishment of ten Catchment Management Authorities (CMA) and the Victorian Catchment Management Council (VCMC). The CMAs are responsible for the health of rivers and waterways and have a clear remit to foster community empowerment through the maximisation of opportunities for community engagement. The VCMC acts as a conduit for CMAs to raise issues and to influence policy, rather than overseeing the work of the CMAs.

Indigenous peoples in Australia have a long history of dispossession; they continue to confront discrimination, and have very poor outcomes with regard to health, life expectancy, education, etc. It is unsurprising therefore to find that indigenous Australians also face significant problems in contributing to the work of CMAs. Fostering the involvement of indigenous Australians was promoted by Monica Morgan, the first indigenous Australian member of the VCMC. The appointment of Morgan to the VCMC illustrated three key things: the legitimacy of indigenous people to an influential body, the ability to educate non-indigenous people on indigenous natural resource management, and the potential of indigenous people to influence NRMPs. With her authority and standing, Morgan was able to argue for the development of protocols which would explicitly detail ways in which indigenous peoples could be included in the work of CMAs.

In 2000 the need to improve participation of indigenous people began with an open-ended workshop with people from the indigenous nations

across Victoria funded by the Environmental Protection Authority and Aboriginal Affairs Victoria. Independent from funders, the workshop was organised by indigenous Australians and agencies. This independence was crucial in the development of trust in the process and contributed to a frank exchange of views and perspectives from all the peoples involved.

Morgan disseminated the findings from the workshop at major events such as the Victorian Catchment Management Conference to raise the profile of indigenous Australian's perspectives on natural resource management. Respect for indigenous interests and values in natural resource management and the importance of ongoing communication were highlighted, as well as the need to develop a set of protocols to facilitate the participation of indigenous peoples. This helped to raise both support and funds.

While there were administrative problems, and a lack of time and finances, these were overcome by narrowing the scope of the project in order to develop a pilot project. The pilot project was conducted in the North Central region of Victoria which contained indigenous nations, four majority nations and two smaller nations. All six nations have high levels of unemployment with a low level of land ownership, although there are "native title rights", which recognises their rights and interests – but not in these cases possession – of land as a result of traditional laws and customs. Whilst indigenous Australians tend to have little involvement in NRM-based industries, such as farming, they are known to have spiritual, cultural and heritage values related to natural resources. They also have a desire to talk to government and land owners to transfer their knowledge of managing natural resources.

As a result of feedback from indigenous people, engagement was developed by providing forums in which their experiences, concerns and knowledge could be shared. This process was not without misunderstandings and concerns; nevertheless, it has contributed to the development of protocols and principles for indigenous engagement in NRMPs. Furthermore, it has more widely influenced regional and State capacity building with indigenous Australians. These protocols appear to have built constructive working relationships between peoples and agencies in regional natural resource management: "the protocol agreements deal with fundamental matters of recognition, mutual respect and acceptance as the basis for future engagement and partnerships" (Smyth, Szabo and George, 2004).

The effectiveness of the project was reliant not only on a key influential member from one of the indigenous nations but also by the design of the process itself. The pilot project allowed for the testing of engagement and capacity building processes that might not have occurred in a larger scale project which suggests that a process for dialogue and decision making, that began to change traditional non-indigenous stakeholders' attitudes of the

importance of traditional natural resource management, had been created. Despite these positive impacts, there were a number of major barriers which challenge the effectiveness of the capacity building process and tools used.

The main problems appear to have been the inability of the process to tackle imbalances in knowledge, understanding and political weight. There was a failure to recognise the potential for diverse needs and knowledge within indigenous peoples. In addition, the project existed and operated in a political context where political weight was not equally balanced between indigenous people and other stakeholders; the result being that they were less able to influence the natural resource management process and strategies. Whilst the inclusion of indigenous people has been widely recognised as illustrating good practice, it should be acknowledged that the people within the six nations were concerned that while the principles were important for offering ways to develop greater participatory decision making, it remained that much of the planning process for the overall natural resource management agreements had commenced with other stakeholders in advance to that of indigenous Australians.

New Zealand

Environment New Zealand 2007 (Ministry for the Environment, 2007) is the second national level state of New Zealand's environment report. It particularly highlights climate change and decline in water quality, as a consequence of the increasing intensity of agricultural production, as major environmental concerns. The following are key determinants of the state of the environment in New Zealand: poor air quality, resulting from home heating and pollution from road transport; increase in national greenhouse gas emissions from the agricultural sector, and energy generation and transport; intensive land use and erosion; and the wider ecosystem effects of human activities on the marine environment, as well as continued threats to native endangered species.

As in Australia, climate change and natural resource management have been the focus of environmental community capacity building initiatives in New Zealand. A number of projects target the indigenous people of New Zealand, the Maori communities. Here also, the government has played a proactive role in community facilitation, although community activism has also played an important role as the case study below demonstrates.

The Zero Waste Trust and WasteBusters. The Zero Waste Trust is a non-governmental organisation established in the late 1990s to campaign for zero waste in New Zealand through recycling and composting. The goal of reducing and, where possible, reusing waste is underpinned by the public's mistrust of using incinerators to burn waste. The implementation of a Zero Waste

Strategy has raised the profile of zero waste to landfill in New Zealand and the Trust has dedicated its efforts towards “zero waste and a sustainable New Zealand”. Zero Waste has worked with both local councils and community groups to develop waste minimisation activities that are part of the principal and philosophy of zero waste.

Essentially, the Trust’s impact has been through the promotion of a vision of zero waste and working with community groups towards that goal. Working alongside those communities they have sought to create collective pressure on national government to take up a zero waste strategy. The Trust was successful in getting the New Zealand government in 2002 to set a goal of zero waste by 2020. This has given the Trust a reputation as an organisation that understands partnerships and has community backing. The Trust has played a key role in illustrating how local communities can deal with their own waste by reducing, recycling and reusing waste.

An example of a community organisation which the Zero Waste Trust has assisted is WasteBusters, which manages the “resource recovery operations” for Ashburton District Council in the Canterbury region of New Zealand. Established in the mid-1990s WasteBusters now employs over 20 people and has a turnover of around NZD 1 million. In 1994 Anita Coghill and Sheryl Stivens were invited to participate in a working party to develop a solid waste management strategy by Ashburton District Council. These two volunteers established WasteBusters Trust and developed a programme to minimise waste in the schools (28 in total) across the District Council area.

Contracted to deliver waste minimisation programmes in schools and to the local community, WasteBusters became involved in the ZeroWaste campaign. First offered a recycling contract by Ashburton District Council in 2001 WasteBusters has gone on to provide other services including composting and an Education Centre whose purpose is to encourage communities to adopt the ZeroWaste agenda. Education has played a critical role in building community support for less waste both from “bottom” and from the “top”. With support from the ZeroWaste Trust New Zealand, WasteBusters was able to provide workshops for local councillors and council officers to present the ZeroWaste approach. At the same time, the work of WasteBusters amongst local communities has played an important role in convincing them to adopt a zero waste approach.

As was noted earlier, the development of local leadership and increased stakeholder engagement and control over programme management are seen as key elements of community capacity building. Local leadership was critical to the initial foundation of WasteBusters and through education programmes, workshops and even activities such as “Winter Waste Fests”, community involvement has been enhanced. One isolated local community within the

district has decided to take responsibility for all the waste which they produce, suggesting that WasteBusters has been successful in not only conveying the zero waste message within the district but also to building the capacity of specific communities.

Furthermore, a central factor in the success of WasteBusters has been their embeddedness in the local community. Not only is the organisation a locally developed one, but it has remained rooted in the community it serves. Employing local people, including disadvantaged and socially excluded people (with government support), has led to the development of WasteBusters as being seen as “an extension of the natural involvement and co-operation” which already existed within the District (Knight, 2007).

The Americas

USA

The US Environmental Protection Authority's 2008 *Report on the Environment* provides information about the state of air, water, land, human health and ecological condition in the United States. There has been a decrease in the emissions and outdoor air concentration trends for selected air pollutants, acid rain, and concentrations of total ozone-depleting substances, but US greenhouse gas emissions from human activities have increased. Fresh surface waters, wetlands and coastal waters show a mixed picture. The report also recognises the occurrence of biodiversity loss.

In the US, community capacity building for environmental issues has been on the political and social agenda following the environmental justice movement. The EPA has engaged with communities to address environmental and health issues arising from pollution and siting of toxic/hazardous facilities. A large number of environmental justice organisations have also been instrumental in promoting community capacity building.

EPA Environmental Justice Demonstration Projects (Barrio Logan). Barrio Logan is a neighbourhood in San Diego (California) with around 6 000 inhabitants. It is predominantly Latino (85%) and has high levels of unemployment and poverty. As a city San Diego has significant problems with pollution, and “communities of colour”, such as Barrio Logan, confront higher risks of pollution related illness. In 2000 the Environment Protection Agency and the Environmental Health Coalition (EHC, a non-profit organisation) came together to make Barrio Logan a Federal Interagency Environmental Justice Demonstration Project. The project was aimed at mobilising resources and co-ordinating business, governments and the community to address their specific needs. The Coalition set up a partnership with the California Air Resources Board, City of San Diego, University of Southern California, federal agencies, and others, to decrease exposure of the residents to

air pollution, reduce incompatible land use, and improve children's health by improving the ambient environment. The Coalition is divided into four campaigns in order to address different issues: the Toxic-Free Neighborhood (TFN) Campaign, Clean Bay Campaign (CBC), Border Environmental Justice Campaign (BEJC), and Community Assistance Program (CAP).

One focus of the partnership was incompatible land use, which exposed residents to excessive pollution levels. After receiving several citations for violating hazardous waste regulations, the company Master Plating closed in October 2002. EPA, and other agency partners, provided technical support during the removal of toxic waste from the site. The partnership has also worked with the community to address air quality issues related to truck idling and parking in residential areas and near schools. This community-led project highlights one of its successes as changing city parking enforcement policies, and reducing air pollution from idling trucks. The TFN Campaign organises low income residents in Barrio Logan, San Diego and Old Town to advocate for the prevention of toxic pollution from industrial and mobile sources. This is integrated into the work of CBC unites workers, bay side communities and conservationists to clean up, restore and protect San Diego Bay as a clean and healthy multi-use water resource capable of supporting a diverse range of activities. In turn the BEJC works to reduce toxic pollution caused by *maquiladora* (assembly plant) industries in Tijuana and to promote fair trade and globalisation for justice. These programmes have been supported by CAPs information programme. The CAP has created fact sheets to help individuals eliminate their use of toxic pesticides and cleaners in the home and guidebooks for government and other institutions. EHC, in turn, is provided with updated information about health and environmental effects and can help individuals, organisations and others reduce pollution. EHC has also helped many groups and individuals fighting for environmental health and justice in other communities.

The integrated collective approach between the organisations to provide information and participation has the potential to cover wider ground and to support an informed capacity building social network. However, it can make it difficult to accomplish a tangible activity given the diversity of actors, with problems agreeing on what actions and steps to take, and their implementation. In addition, the lack of commitment from individual partners can undermine the partnership's collective efforts. At the same time the partnership is sometimes accused of being over-ambitious, instead of adopting an incremental approach; also, it tries to address issues that cannot be resolved in the short term.

Canada

The third annual *Canadian Environmental Sustainability Indicators Report 2007* (Government of Canada, 2007) tracks changes in air quality, greenhouse gas

emissions and freshwater quality in Canada. Air quality indicators showed no significant trends in either direction. The greenhouse gas emissions indicator, which tracks annual Canadian releases of the six major greenhouse gases, found a reduction in emissions between 2003 and 2005 due to a significant fall in electricity production, a lower rate of increase in fossil fuel production, and a decline in demand for heating fuels due to warm winters. The freshwater quality indicator assesses surface freshwater quality with respect to protecting aquatic life but no national trends can be identified due to differences in water quality monitoring programmes across Canada.

Atlantic Coastal Action Program. The Atlantic Coastal Action Plan (ACAP) is a community-based programme initiated by Environment Canada in 1991 in response to increasing concern about the condition of coastal ecosystems and a growing demand for the public to be involved in decision making related to their environments. ACAP involves fourteen sites across Atlantic Canada, with each site having an incorporated, non-profit organisation which is formally linked with other sites under the umbrella of ACAP. Funding for the full-time co-ordinator, office and project work is met by Environment Canada, donations, volunteering and in-kind contributions. At the time of its inception, ACAP's mission was "to help community define common objectives for environmentally appropriate use of their resources and to help develop plans and strategies that help achieve them" (<http://atlantic-web1.ns.ec.gc.ca/community>). As such, ACAP organisations recognise that local communities are the most "effective proponents for effective action leading to sustainable development".

Following the establishment of ACAP, each site was given the task of preparing a comprehensive environment management plan which would identify key issues and outline the potential remedial activities which best addressed local community needs and social and economic objectives. Whilst there was explicit engagement with, and involvement of, local communities it was during the second and third phases of ACAP (1997-2008) that the importance of capacity building became increasingly emphasised. ACAP organisations implemented projects for "Knowledge Generation" which sought to share and disseminate knowledge in order to promote informed decision making. Accompanying these were capacity building projects which sought to create partnerships between local communities and government and non-governmental organisations and to provide the skills which would ensure that the partnerships were effective. Finally, "Action Projects" were implemented which sought to "resolve social, economic, and environmental issues and prevent new issues or conflicts from arising" (<http://atlantic-web1.ns.ec.gc.ca/community>).

The importance of sharing knowledge and building partnerships has been emphasised by the Science Linkages Initiative. This initiative brings

together the ACAP organisations and scientists from Environment Canada to work together on activities such as the development of research of common interest. This research, whilst of use to ACAP organisations, also often “fits” into wider federal and provincial government programmes which help to further promote collaboration.

The success of the first two phases of ACAP led to funding being provided for a further five years (2003-2008) during which the ACAP approach was to be expanded to other parts of Atlantic Canada and multi-stakeholder coalitions based on larger regional areas were to be supported and developed. Accompanying this is enhanced collaboration across departments and governments to support local communities through the broader Sustainable Communities Initiative which was being piloted in Nova Scotia.

The impact of ACAP on local communities should not be seen as being positive in only one direction – that is in helping to foster and maintain community involvement in meeting local environmental issues – there have been clear benefits for Environment Canada as well. The “Windows” programme of Environment Canada, whereby an employee of Environment Canada works directly with one ACAP group on an ongoing basis has not only assisted ACAP organisations to understand the work of Environment Canada but it has also provided a “window” for Environment Canada onto the reality of working with local communities. Indeed, it can be suggested that the “Windows” programme has contributed to changing how Environment Canada works with communities. There has been a move away from a traditional “top-down” approach in the delivery of its programmes and policies towards “co-management”, whereby goals and priorities are established together and solutions are developed with the involvement and buy-in of the key interests.

Joint Action Group for environmental clean-up of the Muggah Creek Watershed (JAG), Sydney, Cape Breton. The Joint Action Group (JAG) was established in 1996 by federal, provincial and municipal governments as a citizens’ advisory group to “educate, involve and empower the community through partnerships, to determine and implement acceptable solutions to Canada’s worst hazardous waste site, and to assess and address the impact on human health” (Palen *et al.*, 2004). The central objective was to identify and recommend acceptable options for the remediation of the Sydney Tar Ponds (the Muggah Creek Estuary) and the former Coke Ovens site, which have been described as Canada’s worst toxic waste sites.

JAG created and implemented a wide range of opportunities for community engagement, using tools such as community meetings, round tables and citizens’ juries, to educate members of the public about the site and relevant clean-up technologies, as well as to gather input regarding acceptable clean-up options. JAG was able to make a number of recommendations to government partners

regarding acceptable remediation options and government partners began implementing some clean-up activities and were engaged in the early stages of an environmental assessment process for further clean-up.

Significant steps were undertaken to educate the public about the characteristics of the site and about possible clean-up technologies. The process emphasised the importance of raising community awareness and fostering community involvement, and significant effort was made to engage and inform the public, such that it became a hallmark of its activities. Indeed, participants played a significant role in designing and implementing the overall community engagement strategy. As a result the process gave people an opportunity to participate in the development of recommendations as to how to move forward with the clean-up of the Tar Ponds Site. Ultimately, however, it must be noted that the option chosen was not that identified by JAG and was delayed by a decision to undertake a large, detailed environmental assessment of the proposed remediation options.

Despite the recognised successes of JAG there were a number of barriers identified which hindered its work. The pace of decision making was very slow, and whilst this was a result of its deliberative nature, it created problems around the expectations people had of JAG and the project generally. At the same time the process was costly. Indeed, the significant levels of active engagement with communities often meant that community members were reported as being exhausted by the process. The multi-layered decision-making process was also felt to be an overly complicated structure (JAG had a Steering Committee and a number of sub-committees).

Mexico

Mexico confronts wide-ranging and complex environmental problems. Deforestation and the destruction of habitat have brought severe soil erosion and rising salinity levels, and a loss in biodiversity. Industrial and agricultural pollutants, as well as untreated sewage, also continue to enter the waters around Mexico. At the same time, a growing and not insubstantial proportion of the people of Mexico face water shortages. Perhaps one of the greatest environmental challenges is that posed by Mexico City. Although the extreme pollution levels once seen are falling, it remains that there are long-term, negative health effects on the residents of Mexico City and surrounding areas to which the pollution spreads.

Green Vision: Diageo's environmental project in Mexico City. Diageo is an international company producing wines, beer and spirits, and has social responsibility programmes in the more than 180 countries in which it operates, including four in Latin America: Colombia, Venezuela, Brazil and Mexico. Diageo launched its urban renewal programme, "Green Vision", in Mexico City in

August 2007. The objective is to protect and create awareness about environmental needs, through the reforestation of one of the few green areas that has survived the urbanisation process of the megalopolis: Los Dinamos forest. According to Diageo, the programme reflects the company's commitment to the preservation of the environment and focuses on the revitalisation and reforestation of metropolitan areas. The capital of Mexico is one of the most polluted cities of the world. With a population of nearly 20 million people and more than 4 million private cars there is an average of 354 vehicles per kilometre of urban roads.

Los Dinamos forest, around 2 400 hectares in size, is one of the main "lungs" of Mexico City. Los Dinamos forest is a part of the wider conservation areas of Mexico City which comprise around 80 000 hectares and provide between 4% and 10% of the water consumed in the city. The Magdalena River flows through Los Dinamos and is the only living river in Mexico City. Over time the volume of water has fallen due to overexploitation and deforestation.

Los Dinamos forest belongs to 300 communal owners who live with their families in the community of Magdalena Atlitlic. They democratically elect their community representatives to a Directing Board, which is responsible for making decisions about the community and its forest. The community's main source of income is tourism and other commercial activities in Los Dinamos, such as small restaurants, the letting of cottages, etc. Until recently there was significant focus on the commercial activities being undertaken in Los Dinamos with little attention paid to the most effective utilisation and preservation of the forest. As a consequence, infrastructure was allowed to deteriorate and the forest became an increasingly unsafe place where groups of young people met to consume alcohol and drugs. As Los Dinamos had been a place for family day trips its decline affected the community's income.

Diageo worked with BetaDiversidad, a private company which develops conservation projects, on the "Green Vision" project. They designed the project and are responsible for the management and operation of the programme. BetaDiversidad established contact with the community and convinced them that "Green Vision" was an initiative from a private company with a genuine interest to help them to preserve the environment to benefit not only the people from Magdalena Atlitlic, but all the inhabitants of Mexico City. Following their initial reluctance, the Directing Board agreed to support the activities under the umbrella of the Green Vision project.

During the first stage of the programme, BetaDiversidad determined what types of trees were suitable to plant in Los Dinamos, in order to achieve better results and also chose the areas where the reforestation would start. Diageo, BetaDiversidad and the community planted thousands of trees in August 2007, installed signals and mapped out a green walkway. Diageo equipped

an office for the community's management needs and provided uniforms to its members. In the second phase, developed from June to September 2008 more trees were planted and two old cottages renovated for the community to serve as security check points. Diageo also organised the "Green Vision Council", which oversees and advises the programme, with personalities from the Mexican society who are committed with the environmental improvement.

The initial reluctance of the communal owners to support the project was an important barrier to be overcome. This reluctance was rooted in the mistrust and hostility which existed as a result of past experience where the communal owners had received promises of assistance, in exchange for political support, which had never materialised. At the same time, communal owners feared a potential change in ownership with federal or local government seeking to take over land ownership in order to allow urban development. Accompanying this, and something which the project itself recognised, was the need for a focus which extended beyond reforestation to take into account the local community. The commitment to provide training and support to the local community and to mix reforestation with activities which will help attract people to the forest, such as the green walkway, has been an important factor in the initial success of the project and in building the necessary trust for this to occur.

However, if the community capacity building element is to be taken further, there is a need for greater training to accompany the reforestation. Ecological preservation needs to be linked to training to community members on how to take further advantage of the forest's natural resources in a sustainable way enabling a holistic approach which balances productive processes with environmental sustainability. Building effective networks of communities, NGOs, government agencies and other relevant actors, will be an important element in sustaining the initial success of the "Green Vision" project.

Evaluation frameworks

The case studies illustrate that the characteristics of projects that develop skills and competencies within communities to tackle environmental issues are in many ways very similar to those discussed in the chapter on community capacity building and social development. As noted, the emphasis is on how participation and empowerment are connected and what happens as a result of those connections. When these connections are effective they raise awareness, develop positions of power, foster skills that remain within the community, and influence how and what policies are made.

What makes environmental capacity building effective specifically is the social, economic and political framing of the importance of creating community resilience to protect their substantive right to a clean and healthy environment,

as well as a shared understanding of why specific environmental problems or issues need to be addressed. There also needs to be clarity about what the barriers are for a specific community to develop natural and built environments that are sustainable and resilient, as well as bringing social, economic and political benefits.

For example, a community tackling flooding is able to protect land and its homes. The skills and the networks developed to focus on the flooding raise other issues around the future of the community, such as providing economic reasons for the younger members of the community not to migrate to other cities, villages or countries. This translates to safeguarding community culture, developing greater access to education and developing partnerships with the private sector or building community-owned enterprises, all of which contribute to the creation of communities which are resilient in the face of environmental challenges (World Resource Institute, 2008).

The success of environmental capacity building illustrated in the case studies suggests the requirement for initiatives that:

- offer or support good governance;
- establish strong community partnerships or ownership;
- are specific to the needs of the different segments of the community;
- remove or tackle (direct or indirect) discriminatory practices or impacts by the community or external stakeholders, such as business or government;
- provide accessible information;
- offer financial, technical and human resources to address damage/concern;
- enforce environmental law, policies or agreements;
- create social, political and economic long-term benefits; and
- include intermediary support by government, community networks and/or agencies.

These factors can also be mapped against theoretical frameworks for environmental capacity building by Weidner (2002) and dimensions of community building and environmental health by Goodman (Goodman *et al.*, 1998). Weidner (2002) defined environmental capacity building as capacity that relates to how environmental problems are defined and solved, and how society develops its ability to identify and tackle that problem. He suggested that the ability of a community or society to do this can be illustrated through a “multi-factorial process”. This process is defined by the situational context in relation to the actor, the strategy and the structure of the problem, specifically with the primary concern of developing environmental protection solutions.

The conditions that seemed to be met within the case studies were those expressed by Weidner (2002) as having a high capacity for environmental policy and management. These were:

- well-organised environmental players;
- well-established co-operative inter-organisational relations;
- comprehensive and accessible monitoring and reporting systems;
- a high degree of environmental awareness among policy makers, the general public and the mass media; and,
- an ability to interpret information in a politically strategic way.

However, it could be argued that the capacity for environmental management did not need to be at a state level but within the community and/or the intermediaries it worked with or had access to. In addition, these indicators should be seen as not necessarily the starting point for effective environmental capacity building but rather indicators of a successful environmental capacity building initiative.

Table 4.3. Dimensions of environmental capacity building

Dimension	Definition
1. Shared concerns	Shared understanding of the environmental issue or concern and a shared desire to develop a solution which offers community benefits.
2. Community identity	The extent to which the community has a shared sense of self and an understanding of its history and how these may inform the context of the environmental issue. Shared norms, morals or principles around environmental and social justice and natural resource management.
3. Participation	Extent to which the members are involved in relevant decision making and what control they have as to how the issue is addressed. Ability to participate, collectively and individually, in reflecting upon and analysing failed or successful processes or solutions.
4. Inclusion	Extent to which participants not part of the mainstream community are involved and the extent to which specific groups – for example, women, young people, minority groups or the poor – are able to influence and shape the solution.
5. Leadership	Extent to which policy makers, funders or sponsors are experienced and willing to address environmental issues and the social, economic and political connections.
6. Access to accessible information and rights	Ability to access information; and to adapt or exchange that information with the wider community. Level to which environmental laws are able to be enforced.
7. Skills and resources (financial, human and social)	Level of skills and interdisciplinary knowledge among the participants and the community actively engaged in addressing the environmental problem. Ability to outsource or gain skills from academics, policy makers and so on.
8. Political influence	Awareness of the political infrastructure at community level, and the ability to act and influence policy, media and decision-making structures within and outside (national and local) of the community.

As Minkler (Minkler et al., 2006) note there are a number of determinants that shape and influence capacity building within the environmental context. These determinants create complex dynamics when they interact with the variable characteristics of a community: demographics, physical and social environments, networks, population, government and the markets. Using the adaptation of the dimensions required of community and partnership capacities that are relevant to environmental health (Minkler et al., 2006). Table 4.3 identifies the characteristics required for resilient environmental capacity building and the analytical process for defining its success. These behavioural manifestations and actions increase a community's power to successfully tackle environmental issues. This also supports the notion that the determinants for successful environmental capacity building can support a systems approach, whereby feedback loops lead to additional mobilisation, community action and problem solving.

Exploring the determinants of successful environmental capacity building

Shared concerns and understanding of a community history

The notion of what a community is, how it is defined and by whom, as well as who is perceived as belonging to it, as we have seen in relation to capacity building generally, is particularly important in setting the context for evaluating any type of capacity building. For socially and environmentally just capacity building the added context is the extent to which the environmental concern has an inequitable impact and the extent to which the focus of the solution is to remedy this. The US Community-Based Participatory Research (CBPR) Partnership noted that the “critical *raison d’être*” for developing partnerships and networks was the immediate physical threat and disproportionate burden of pollution on low income, Black and minority groups. The inequality and the lack of mainstream political influence, the sense of wrong being done created a mandate for community capacity building. Equally the belief that there was a “community” solution that used and understood a community's history, skills, and expertise acted as a positive force for participation and the development of partnerships and networks was also important.

Community identity

Evaluating the success of an initiative depends on a number of variables within the community and to what extent and how a group of people can define themselves as a community. Now, what defines a community can be complex. Confusion around the term can also be reflected in the community itself and within external stakeholders. In a number of the case studies, a

group can be defined as a community because of its shared concern for an environmental issue or problem.

Participation and inclusion

The partnership in Transylvania recruited residents in local villages affected by the flooding – albeit with an initially low presence of women. Coastal Futures in the UK concentrated on residents who may be at risk of losing land to flooding and the process of realignment, but without a specific focus on reaching out to vulnerable sections within those affected communities. However, the inclusion of vulnerable or excluded people or groups was sometimes problematic. The importance of including women, young people, the poor or minority groups should not be ignored, and indeed, it may be necessary to have multiple approaches to capacity building for different groups within communities if it is to be a genuinely inclusive process. Building trust is a key way of fostering participation, as the example from Mexico highlights.

Leadership and political influence

The ability of projects and individuals to play a leadership role seems to be key to their ability to gain political influence. In the case of WasteBusters the organisation was recognised as a leader in the work they were doing. Their local embeddedness and awareness of the political infrastructure at community level was crucial to the ability of WasteBusters to act and influence policy and decision-making structures within and outside. The importance of individuals should also be acknowledged. Monica Morgan both initiated the project to increase the involvement of indigenous Australians in natural resource management and played a crucial role in driving it forward. Her position on the VCMC meant that she was in a position to understand and influence the structures which were in operation and therefore to enhance the contribution which indigenous Australians could make to natural resource management. This was not enough, however, for there to be significant concern at the way in which indigenous Australians had not been involved from the start of the process.

Access to information and rights

Access to environmental information was key to all the case studies. The provision of accessible information – maps, scientific data and policy overviews – was crucial to help communities to make informed environmental decisions.

Skills and resources

The ability to gain resources – financial and human – within a community and from supporting non-governmental organisations, funders or government was crucial to the projects' ability to maintain momentum. In the case of the

Partnership in Transylvania, the Pentecostal Church's funding and information was instrumental to the community's ability to mobilise not only around the problem of flooding but also in embedding fundraising skills with community members who were then able to raise funds for spin-off projects.

Implications and policy recommendations

Whilst there are limitations to the case studies, it is clear that from the diversity of experiences discussed in this chapter, that implications for governments, funders, and non-governmental organisations involved in environmental community capacity building can be identified.

The positive message is that in a number of cases the role of *government* or government agencies could provide valuable resources. Many of the initiatives were funded by partnerships which included government partners. Not only did government provide crucial funding, government employees were also able to offer policy mentors or windows to communicate perspectives between government and the community they partnered with.

However, to support community capacity building which tackles environmental inequality effectively, government policy makers will need to shift towards supporting capacity building on environmental issues that have both social and environmental equity as a central theme.

Governments also need to have clear understanding of the impact of environmental inequalities on vulnerable communities and work with those communities to define appropriate indicators for tackling these inequalities. Such indicators could also help with the evaluation process of capacity building projects they support. Governments should therefore:

- support and resource community capacity building initiatives when they are framed by environmental and social justice principles;
- support schemes where policy makers are able to provide skills to communities and operate as objective “policy mentors” to communities if requested by community groups;
- ensure that state capacity building initiatives are designed in collaboration with communities and that communities are involved from the very start of those collaborations; and,
- advance policies and legislation which support access to environmental information, participation, decision making and justice.

Funders which support community capacity building need also to gain a clear understanding of the potential negative burden and disproportionate impact environmental inequalities can have on poor, minority or vulnerable groups. Strategic approaches and action plans which take these into account

should be designed after robust, transparent, and equitable dialogue with the communities they aim to support. They therefore should:

- provide resources that underpin integrated capacity building approaches which improve the environment and provide social and economic benefits;
- only provide funding to community capacity building projects where the initiatives have clearly shown how they will include and support beneficiaries from vulnerable communities.

Finally, non-governmental organisations, community groups and civil society organisations provide a major gateway for community action and are often trusted and have built up relationships of trust. NGOs, however, like funders and governments, need to have a clear understanding of the impact of environmental inequalities on the communities they work with.

- NGOs must therefore ensure that they are working with vulnerable groups or communities; and,
- should develop a greater voice for tackling the potential disproportionate impacts of a degraded environment within capacity building initiatives.

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Glossary

Community: Historically, this has been taken to mean a defined geographical area but now is recognised as concerning also either communities of interest (*e.g.* parents campaigning to slow traffic) or communities of identity (*e.g.* gay and lesbian people). These communities may overlap in practice.

Community Capacity Building: A process of enabling those living in poverty to develop skills and competencies, knowledge, structures, and strengths, so as to become more strongly involved in community as well as wider societal life, and to take greater control of their own lives and that of their communities.

Community Development: A defined practice aimed at helping communities express their needs and meet them through organisation; the practice has a knowledge and skills base and is informed by a clear set of values.

Co-operatives: Commercially based mutual organisations where producers and suppliers group their resources, expertise and purchasing power together so as to derive the most advantageous commercial returns for member individuals and organisations. Co-operatives exist in both profit and non-profit settings but both share the aims of maximising the overall value of their members' efforts and resources.

Credit Unions: Mutual (and typically local) financial organisations owned and operated by contributing members. They rely on peer responsibilities and motivations (as well as local knowledge and networks) to award loans and investments to member individuals and local businesses within a given locality.

Environmental Justice: A narrative of equality and justice which refers to the equitable share of the environment (built and natural) of all humans, and recognises the inequitable impact of environmental ills, such as pollution, on predominately vulnerable groups or communities such as the poor, minority groups and indigenous peoples.

Franchise: Business agreement where an entrepreneur "rents" a brand together with information and support on production and service methods. A huge range of world famous brands such as McDonalds, Subway and Holiday Inn are made up of franchised business arrangements consisting of partnerships between international organisations and local business entrepreneurs.

Local Exchange Trading Schemes (LETS): Schemes where new or alternative currencies are developed that encourage local producers or experts to trade their produce or expertise with others in a locality through bartering and trading with the currency. Often the currencies are named after the local areas in which they operate such as the Greenwich Anchor based in Greenwich (London, UK).

Participation: A much (mis-)used term used to describe involvement of “users” or “communities” in policy or service development. Levels of participation may vary from very low, tokenistic involvement with little effective impact through to exercising substantial control over policy or service development.

Reinvestment Trusts: Financial vehicles raising income based on investment in specific (usually deprived) areas. Investment may come from local businesses, people or organisations (such as local government) or from external investors such as national government, banks, pension funds and charitable foundations.

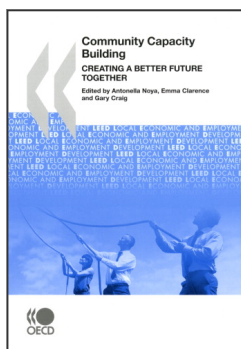
Social Development: A term which covers the meeting of social needs by government, private or Third Sector organisations or, the case of development aid, by donors external to a specific country, particularly in the areas of housing, health, education, infrastructure and poverty and income maintenance. Unlike community development, social development does not necessarily require the involvement of local communities in its planning and execution.

Social Economy: It encompasses various types of organisations, such as associations, co-operatives (including social co-operatives), mutual organisations and, more recently, foundations. Social enterprises also belong to the social economy sector. The term is sometimes used also with reference to the non-profit sector, even if the latter does not include co-operatives.

Social Enterprise: Various definitions exist, based on the legal or organisational form or on the objectives of the social enterprise. The definitions vary according to the geographical and cultural contexts. Social enterprises are businesses which are organised with an entrepreneurial strategy and whose main purpose is the attainment of economic and social goals, in order to meet unsatisfied needs. They can bring innovative solutions to the problem of social exclusion and are an agent of balanced economic growth; they operate in many sectors, but focus mainly on reintegrating people who are socially excluded and delivering welfare services.

Social Housing: Housing provided by a range of agencies on the basis of defined need (*e.g.* low income, disability) rather than to make profits.

Sustainable Development: Development which recognises that meeting contemporary needs should not be at the expense of those of future generations. It also incorporates wider social and economic justice components and the recognition that there is a need for development which balances environmental, economic and social benefits.



From:
Community Capacity Building
Creating a Better Future Together

Access the complete publication at:
<https://doi.org/10.1787/9789264073302-en>

Please cite this chapter as:

Adebowale, Maria and Lovleen Bhullar (2009), “Community Capacity Building and the Environment: Sustainable Development and Environmental Justice”, in Antonella Noya, Emma Clarence and Gary Craig (eds.), *Community Capacity Building: Creating a Better Future Together*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/9789264073302-5-en>

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