

**ENVIRONMENT AND COMMUNITY:  
CANADA'S ATLANTIC COASTAL ACTION PROGRAM (ACAP)**

**Guy M. Robinson  
School of Geography  
Kingston University (UK)**

*Abstract*

Canada's three billion-dollar Green Plan, formally announced in December 1990, aims to secure for current and future generations "a safe and healthy environment and a sound and prosperous economy". One of the themes in the Plan is the need for active community involvement in tackling development issues, if sustainability is to be achieved. This paper examines one community-based initiative within the Plan, namely the Atlantic Coastal Action Program (ACAP) which is one of five regional ecosystem-based schemes under the aegis of Environment Canada, with an emphasis upon partnership-building, science, leadership and environmental citizenship or community involvement. ACAP was launched in 1991 as a Can. \$6 million project to run for six years. It was aimed initially at restoring and maintaining environmentally-degraded harbours and estuaries in an area in which substantial parts of the coast were experiencing pollution problems. Thirteen groups were selected as participants in the Program, including areas with riverine environments and drainage basins as well as estuaries and coastline. The character of the project areas is varied, ranging from urban settings with heavy pollution of harbours, to areas with traditional industries associated with pollution, and areas with run-off from heavily fertilized and chemically-treated farmland. This paper will focus upon the nature of community participation in ACAP and on the management of the scheme. Special reference will be made to three of the more rural ACAP areas: the Clean Annapolis River Project (Nova Scotia), the St. Croix estuary (New Brunswick) and Bedeque Bay (Prince Edward Island), reporting a series of interviews with active members of ACAP groups, government officials and local citizens. One initial conclusion is that, despite relatively low participation rates, environmental improvements are already evident.

**Introduction: The Establishment of ACAP**

Community-based environmental management has been part of Canada's three billion-dollar Green Plan, formally announced in December 1990 "to secure for current and future generations a safe and healthy environment and a sound and prosperous economy". Within the Plan there are five regional ecosystem-based initiatives under the aegis of Environment Canada: the Atlantic Coastal Action Program (ACAP), St. Lawrence Vision 2000, Great Lakes 2000, the Northern River Basins Study and the Fraser River Action Plan. Through these initiatives Environment Canada is attempting to provide best examples of how sustainable development may be achieved through an 'ecosystem approach' in which planning and decision-making combines economic, environmental and community-based elements (Environment Canada, 1994; 1995).

This paper examines one community-based initiative within the Green Plan, namely the ACAP, launched in 1991 as a Can. \$6 million



initiative to run for six years. It was aimed initially at restoring and maintaining environmentally-degraded harbours and estuaries in an area in which substantial parts of the coast were experiencing pollution problems. Thirteen groups were selected as participants in the Program (Figure 1).

ACAP has focused on the creation of local committees comprising a cross-section of community residents, local government officials and representatives of local businesses, especially the key economic interests of the area such as agriculture, pulp milling, extractive industry and fishing. The thirteen designated areas include some riverine environments and drainage basins as well as estuaries and coastline. Within the designated areas local committees have been encouraged to adopt an holistic approach that considers the social and economic aspects of their area as well as the more narrowly-defined environmental remit. This gives ACAP a broad aim of improving and protecting the natural heritage so that the coastal, estuarine and riverine environment can contribute fully to the development of local communities.

The character of the project areas is varied, ranging from urban settings with heavy pollution of harbours to areas with traditional industries associated with pollution and areas with run-off from heavily fertilized and chemically-treated farmland. This diversity has been reflected in the different foci and approaches pursued by the thirteen management committees. Consequently, the single model for each area originally envisioned by Environment Canada has been replaced by flexibility. There is an important common element, though, a requirement to deliver a comprehensive environmental management plan (CEMP) at the end of the six-year initial funding period.

Each ACAP area received an initial allocation of Can. \$50,000 per annum for five years, largely for the hiring of a co-ordinator to be appointed by each area's multistakeholder management committee. Subsequently, additional variable funding has been allocated at the discretion of Environment Canada, depending on the individual requirements of the ACAP areas. Environment Canada's role has been transformed into one in which provision of information, advice and guidance has become more important. A formal link to each ACAP area is maintained via the presence of a link person on each of the area management committees. In each case this person is an employee of one of the branches of Environment Canada and therefore is well placed to act as a link between the government agency and the committee. The agency has provided short training sessions for the co-ordinators and has developed a series of guides covering project leadership and preparation of management plans (e.g. Environment Canada, 1993a; 1993b). However, it does not formally approve workplans as their content is the responsibility of the individual committee. The agency

allocates a budget based on the workplan and advises other relevant agencies who may be able to contribute to the plan.

### **The ACAP Groups**

Environment Canada set out a number of objectives for each ACAP group to pursue prior to presentation of their CEMP. Of these the most fundamental was the assessment of environmental quality, including identification of all sources of environmental problems, to be followed by the development of a long-term vision, supported by clear objectives necessary to attain the long-term goals. Necessary remedial actions and conservation measures were to be identified and assessed. There was to be promotion of environmental stewardship through education and awareness activities, plus the implementation of pilot projects to demonstrate the importance and effectiveness of low-cost, innovative solutions to environmental issues in the watersheds. Therefore the aim is to link information from environmental quality assessments, specific practical projects and an assessment of remedial measures to devise a long-term strategy including implementation of environmental protection and rehabilitation measures.

The work of each group is controlled by its multi-stakeholder committee, so it is largely a participant-determined and -driven process involving various practical management measures to improve the environment prior to formal submission of CEMPs. The multi-stakeholder committees, which are effectively management boards of the ACAP groups, include representatives from community groups, leaders of industry, members of academic institutions and government, and individual citizens. The boards represent the equivalent of a local 'round table', group of partners or multi-stakeholders working co-operatively to introduce innovative local actions to deal with environmental problems. So there is local ownership of actions and solutions, overseen by the board which operates through a board-appointed coordinator who sets in motion the local actions.

The focus of these local actions was set out in Environment Canada's initial planning for ACAP. Five key aspects were identified: sustainable livelihoods, natural heritage, water quality, responsible stewardship, and ecosystem planning. Therefore, at the heart of the scheme is the intention of ensuring a sustainable quality of life through the diversification and sustainability of livelihoods. In practice this has involved the restoration of traditional livelihoods, such as shellfish harvesting, fostering the sustainability of existing livelihoods like forestry, and assisting in the introduction of new sustainable industries such as ecotourism. Perhaps the commonest project within the ACAP groups has

been the monitoring of water quality as the first step towards ensuring that water quality in the coastal areas and adjacent watersheds supports the needs of humans, fish and other wildlife and can sustain commercial and recreational activities. Responsible stewardship has been promoted through environmental education activities, creation of opportunities for meaningful citizen participation and by communicating ACAP groups' accomplishments and best practices. With respect to natural heritage key work has included sensitivity mapping, resource inventory and analysis, the restoration and protection of fish and wildlife habitat and the enhancement of biodiversity. Some of this work has been accomplished through the securing of commitments to implement desirable actions and for a role for ACAP groups in implementation and evaluation.

The diversity of the ACAP groups has been shown in their response to these five broad concerns and in their individual determinations of what are the priority actions in their own areas. For example, on Prince Edward Island the Bedeque Bay Environmental Management Association (the ACAP group centred on Summerside) has focused on the sets of actions set out in Table 1, each of which subsumes some part of the five issues.

**Table 1**  
**Key Activities and Projects of the Bedeque Bay Environmental Management Association (BBEMA), Prince Edward Island**

- \* cover crop management
- \* development of a hedgerow award and brochure on "farming with hedgerows"
- \* environmental awareness and education activities for community and school groups
- \* environmental farm planning
- \* beach clean-ups and coastal awareness
- \* environmental theatre
- \* environmental quality assessment for the watershed
- \* heritage tree and shrub trail
- \* local newspaper column
- \* citizen-based environmental monitoring
- \* fish habitat assessment
- \* workshops and public meetings on watershed concerns

### **Community-Based Planning within ACAP**

The theory and practice of socio-economic development has increasingly placed emphasis upon 'community' as the fundamental building block for turning policy into action. In part, this emphasis derives initially from negative experiences with development projects in developing countries in the 1950s and 1960s. These projects were dominated by a 'top down' approach, determined by national governments and large non-governmental organisations such as the World Bank, and characterised by narrow economic principles that neglected local, self-determined, objectives (Friedmann and Weaver, 1979). During the last decade this approach has increasingly been superseded by policies that have some element of control or specific input 'from the bottom', that is with a community base (e.g. Countryside Commission, 1991; Martin, 1995; Robinson, 1992; Stohr, 1990; Varley, 1991; Wilkinson, 1991).

These bottom-up schemes have taken a variety of forms, from complete control by self-regulating citizens' groups to a large element of control still resident in the hands of local, state or even federal government. Indeed, often the term 'bottom up' or 'community-based' seems inappropriate as the initiative for a particular programme can reside in a particular level of government despite strong community-level involvement and even direction. ACAP is just one example of these initiatives, though it is fairly typical of the type of collaboration that can occur between a community and an arm of government, in which collaboration is viewed by both sides as a means to tackling a particular set of problems. However, as in many cases of planning termed 'bottom-up', the initiative has come primarily from a government agency, Environment Canada, who have sought new ways of harnessing community interest, resources and skills to meet a set of clearly defined environmental aims.

In the case of ACAP groups, the community has been interpreted as the stakeholders or representatives of sectoral interests such as farming, fishing, pulp milling and government. In Bedeque Bay and St Croix for example, this approach was a deliberate policy in the establishment of a Board that had representatives of clearly defined groups. In contrast, in the Annapolis Valley the CARP board is elected at an AGM of its members and so may not necessarily include individuals from specific sectoral interests. Indeed, representation from a wide cross-section of the community has been something of a problem for the ACAP groups. For, although each ACAP group have made attempts to encourage residents both to participate in projects and to be members of the group, membership levels were very low in all thirteen areas (under 75). This may suggest lack of widespread community involvement with and awareness of ACAP and therefore a limitation on the extent to which the scheme can be said to be truly community-based. Yet, this does not mean that the operation of the groups has been entirely dominated by the dictates of Environment Canada. But it

does highlight the fact that ACAP is essentially a 'top down' system in terms of the initial ideas flowing from a government agency to the community rather than the other way round. The scheme does incorporate some leadership and representation from within the community and this has often shaped the resulting agenda. However, there remains the overarching responsibility of Environment Canada to drive the initiative and "to direct people's activities to ensure they remain focused and achieve the established goals" (Environment Canada, 1995, 5). This entails the government agency acting as a facilitator and working with stakeholders to meet common goals, so that there is a combination of both 'bottom-up' and 'top down' thinking.

The facilitation role involves generating community support for the project and then reaching agreements on specific actions. Therefore facilitation is a 'matchmaking' exercise linking communities to government services and non-governmental support from as wide a range of sources as possible. Training of facilitators, in this case the ACAP group co-ordinators and the 'windows', has been a feature of this arrangement.

### **Citizen Participation in Three of The ACAP Areas**

The limitations on the citizenry's knowledge of the scheme and on direct participation in conservation activities was revealed by the author's survey in three of the more rural ACAP areas. These were Bedeque Bay, Prince Edward Island, the Clean Annapolis River Project (CARP), Nova Scotia, and St. Croix, New Brunswick. The investigation involved conducting structured interviews with a random selection of householders and workers in the three areas. Although much of the information gathered during these interviews was qualitative in nature, in the form of opinions of ACAP and local community action, some basic quantitative information was also generated.

#### **a) St. Croix, New Brunswick**

The St. Croix estuary forms part of the border between New Brunswick and the American state of Maine. The waters of the estuary provide income for fishermen who exploit the plentiful shellfish beds and inshore fisheries. The estuary also attracts a significant tourist trade centred on the resort and retirement town of St. Andrews-on-Sea (Rees, 1995). There are pollution issues relating to the disposal of domestic sewage into the waterway and industrial effluent from paper mills and other industries around the border towns of Calais (Maine) and St. Stephen in the north of the ACAP area.

Interviews were carried out in St. Andrews-on-Sea (population 1,750), the location of the local ACAP office, and some school-children

involved in monitoring of water quality at St. Stephen were also contacted. An over-representation of women in the cohort of St. Andrews' respondents, and particularly those of retirement age, reflected the demographic character of this tourism and retirement centre as did the high representation of people from the professional and business sectors. Given this character of the interviewees, it is not surprising that half of them had heard of ACAP either by reading the local newspaper column written by the ACAP co-ordinator or by attending meetings at which ACAP staff gave presentations regarding the scheme. Only seven of the 31 interviewees had no knowledge of the scheme. However, just over one-third could say little more about ACAP than it was concerned with water pollution in the estuary. A further one-third were able to refer to the water monitoring activities, reflecting the high profile locally of this monitoring activity which has involved fifty volunteers, including students from high schools in St. Stephen and Calais.

The volunteers tested for faecal coliform bacteria (generally from sewage), dissolved oxygen, temperature and salinity. There was also limited sampling for metals and nutrients, but faecal coliform bacteria were the primary focus because of the history in this area of sewage-contaminated clam flats. Seventeen sites in Maine and 22 in New Brunswick were monitored systematically, and this received prominent coverage in the local press. Furthermore, the presence of the Huntsman Marine Laboratory in St. Andrews-on-Sea has helped to raise awareness of the focus of scientific research activities on the waterway, and especially of pollution monitoring activities. There was direct evidence of the spread of information from the Laboratory, with six of the interviewees referring to contacts with Laboratory employees acting as a source of information on ACAP.

## **b) Bedeque Bay, Prince Edward Island**

The Bedeque Bay Environmental Management Area (BBEMA) covers approximately 450 sq. km, including the watersheds of the Dunk, Wilmot and Bradshaw rivers, and the coastal area around Bedeque Bay itself, containing the city of Summerside (population 15,000). Much of this area is under intensive cultivation of potatoes, though there is also some dairy farming. There are problems of soil erosion as a result of potato monoculture and run-off of agricultural pesticides into the watercourses, both of which threaten fly-fishing in the rivers. In the Bay oyster spats are suffering from sewage effluent discharged at Summerside. To maintain an oyster industry, the spats are transferred to Malapeque Bay, six km to the north.

The local ACAP group has identified soil erosion as the prime environmental concern of the area. Erosion not only removes thousands of

tons of topsoil, but much of it is deposited in local rivers and washed into the Bay. Remedial action promoted by the group to restrict pollutant run-off includes erosion control through crop cover management, the use of a natural filtering system for tile drains, a nitrate monitoring project (Wellwatch), promotion of environmental education, environmental farm planning workshops, and hedgerow- and tree-planting schemes. In the city of Summerside, a tree planting scheme was underway at the time of the author's survey as was the creation of a coastal pathway which, at the time of the interviews, was a topic of interest in the local press.

There were some initial difficulties in forming a broadly based board for the BBEMA ACAP group and also with establishing clear aims and objectives. The co-ordinator was replaced after eighteen months and this resulted in a new approach being taken that has given greater prominence to practical projects, education and communication with the local community.

Interviews with local residents were carried out in Summerside and in the rural community of Bedeque. The cross-section of residents contained a higher proportion of individuals who were long-term residents (over 30 years) as compared with the other two areas studied, but there was a higher proportion of manual and semi-skilled workers in the area and this was shown in the interview cohort. This reflected the character of employment in Summerside and also the inclusion of some farm labourers from Bedeque village. A higher incidence of no knowledge of ACAP was recorded despite the presence of a regular local newspaper column from the ACAP co-ordinator. This limited extent of knowledge may simply be a reflection of the relatively short period of time that the ACAP group has been operating under its current board and co-ordinator. Information passed on by friends was an important way in which residents had gained some knowledge of the ACAP scheme, but a high proportion of the sample couldn't provide much detail as to what the ACAP group were doing. One-third of the sample had no knowledge of BBEMA or ACAP. In contrast, one-third were able to provide a good to very good account of the ACAP group's activities, largely reflecting some of the Summerside residents' familiarity with attempts to establish a coastal pathway in the area or participation of Bedeque residents in the Wellwatch project.

### **c) The Annapolis River Valley, Nova Scotia**

Interviews were conducted at three locations in the area covered by the Clean Annapolis River Project (CARP): in Annapolis Royal (population 800), where CARP has its office; Bridgetown (population 1,250), 23 km upstream from Annapolis Royal, and Smith's Cove (population 300), a retirement and second home community on the southern part of the river's

estuary, 4 km from the fishing port of Digby. Established prior to the ACAP scheme, CARP covers an area of over 500 sq. km in the Annapolis Valley, western Nova Scotia. CARP was founded in 1990 to promote, encourage and assist with the management of the resources of the Annapolis River and its watershed. It was incorporated into ACAP as it espoused many of the same aims and ideals as those being promoted by Environment Canada through the ACAP scheme, and a strong set of links had already been established between CARP and other environmental organisations throughout the Bay of Fundy and Gulf of Maine areas. Similar links have been promoted in the other ACAP areas, and so some aspects of CARP's activities have served as role models.

CARP has been involved in over 30 projects related to water and energy conservation, stream bank reforestation, salt marsh protection, fish habitat restoration, water quality monitoring by local citizens, processing of agricultural waste on the artificially-created wetlands, promotion of public awareness and education, soil erosion, coastal zone management, ecological modelling, waste water management, environmental quality assessment and community involvement (Hawboldt, 1995). It has probably been the most successful of the ACAP groups in terms of raising income and generating employment. It employs 13 people working from the CARP offices in Annapolis Royal and from donated space at the Nova Scotia College of Geographic Sciences and the Acadia Centre for Estuarine Research where research projects valued at more than Can. \$100,000 are based. Income in 1995 was Can. \$327,000, with twelve major initiatives underway. In a strongly entrepreneurial conception of the role of an ACAP group, it has encouraged employment and business opportunities to develop in conjunction with its other activities and has also sought to promote its ideas on environmental improvement outside its own area.

The most important public awareness project is the creation of the Annapolis River Guardians, with 40 sites being monitored by 50 volunteers. Other key activities include a demonstration project on agricultural wetlands, fish habitat restoration, the promotion of 'river friendly' farming, and attempts to involve farmers in the river basin to participate in a stewardship project to improve water quality.

In the sample of residents interviewed 40 per cent had lived in the area for less than ten years, but a higher proportion had a reasonable knowledge of CARP than had the residents of St. Andrews or Bedque Bay for their respective schemes. This knowledge was not gained by personal involvement, but from secondary sources, notably the local newspaper, half the interviewees referring to this as their source of information. Surprisingly, nobody referred to attendance at CARP-organised events, though several reported that they had friends who had done so. There was a strong link between the socio-economic character of the interviewees and

knowledge of CARP. There is a high proportion of residents from the professions and business sector in Annapolis Royal and this section of the community was well acquainted with the scheme. In general this was an area with a high degree of awareness of local issues, and CARP in particular, reflecting the social composition of the area. A contrast can be made, though, with St. Andrews where there was a similar domination of people from the professions and the business/service sector, but a poorer knowledge of the ACAP scheme. This may reflect CARP's greater longevity, but also the intangible sense of greater communal activity in Annapolis Royal and Bridgetown. This sense of community was frequently referred to by local residents during interviews. However, as in the other two areas, any development of knowledge of the ACAP scheme was translated into limited direct involvement. Hence the overall impression from all three areas was of relatively limited community participation. Of all the 95 interviewees selected at random, four were members of their local ACAP group, though an additional 13 had some direct involvement with ACAP activities. This membership and participation represents nearly 18 per cent of the sample which, if translated to the population as a whole, could be interpreted as a high level of participation. However, this must be tempered by the fact that participation was usually restricted to some facet of monitoring activities, in which case knowledge of ACAP was usually related to that activity only with limited appreciation of the broader aims of the local ACAP group.

### **The Ladder of Participation**

It is apparent from the interviews in the three ACAP areas that there is an opportunity for more consideration to be given to the 'ladder of participation', to the meaning of 'community' and the extent to which actions can genuinely be initiated by local people. As in many similar ventures in other parts of the world, there is evidence that community-based activity relies on the actions of just a few well-motivated enthusiasts who are not representative of the community as a whole. This means that certain communities are much more likely than others to be susceptible to ideas embraced by community-based schemes. Those that have a dearth of people with the time, ability or inclination to promote local action will struggle to initiate bottom-up approaches. One consequence of this is a need for schemes based on community action to include a significant investment in training and facilitation and other forms of support to the local community. This implies that community action cannot be seen as a cheap option.

The most crucial constraint upon effective public participation is the extent to which politicians, civil servants and professional organisations wish to make participation a reality. This may be even more important than

public apathy which often expresses itself in the way in which individuals rarely attempt to seek participatory action despite having legitimate concerns regarding local issues. However, even encouragement from government and existing local organisations may never extend participation beyond the confines of a minority dominated by activists, critics and reformers. Furthermore, it can be argued that participation is rarely the precursor to communities being able to exercise power needed to affect the outcome of any given process.

**Table 2 The Ladder of Participation**

8 Citizen Control	Degrees of Citizen Power
7 Delegated Power	
6 Partnership	
<hr/>	
5 Placation	Degrees of Tokenism
4 Consultation	
3 Informing	
<hr/>	
2 Therapy	Non-participation
1 Manipulation	

Source: Arnstein, 1969, 217.

In recognising the limitations of transfers of power within community-based schemes, Arnstein (1969) constructed a ladder of participation (Table 2), ranging from citizen participation as rhetoric only to citizen control, on an eight-rung ladder. Although this may be a gross over-simplification of the participation continuum, it is indicative of the fact that there are significant gradations of citizen participation, related closely to the redistributive effects upon power within any given participatory process.

An important limitation to the classification is that it necessarily views communities and government as monolithic rather than as encompassing multi-faceted points of view. Policy-makers have been too ready to view 'community' as a self-contained, cohesive group where everyone has shared interests and can express a well-articulated single view. This hides the reality of social, cultural and political divisions that are present even in small rural communities. Therefore citizen participation at any of the levels of the ladder might be viewed as satisfactory by one particular group in a community, but not by others. This raises additional questions as to just who 'participates', how and why, and who in a community is excluded. At what stage in policy-making does participation

enter in and for what reasons?; is it viewed simply as a technique for implementing technocratically designed plans? (Steifel and Wolfe, 1994, 8).

### **Conclusions**

The findings from the surveys carried out raise the question as to what community is really being served by ACAP boards and on whose behalf boards' agendas are being implemented. The initial findings are suggestive of other work on community activities in rural areas where participation rates in such activities and interest in environmental issues is equated with only limited participatory action by local residents (e.g. Hannan, 1979). However, in the case of ACAP, the establishment of thirteen multi-stakeholder boards is a considerable advance on the previous degree of involvement in environmental protection and management by individuals from key sectors of community life. In particular, the inputs from representatives of local industries on many of the boards have been regarded by co-ordinators as constituting a significant advance. It has helped industry to become more aware of outside views of its activities whilst also enabling industrial participation in schemes to ameliorate pollution.

The author's survey of community involvement with ACAP reveals a relatively low level of direct involvement in ACAP activities and a restricted awareness of both the local ACAP group and the overall scheme. Yet the fact that over 40 per cent of respondents had a fair to excellent knowledge of their local ACAP group represents quite a strong degree of awareness of community environmental issues and may be seen perhaps as a first step towards more broadly-based community involvement. Indeed it could be argued that the involvement of residents in certain facets of environmental monitoring and improvement activities is actually quite high (approaching one-fifth of the sample interviewed).

ACAP can claim a number of significant successes. The diversity of operations performed by the thirteen groups reflects sufficient flexibility in programme delivery and financial control for the aspirations and demands of the individual groups to have been largely fulfilled. The agenda has been transformed from one determined and controlled by Environment Canada to one dominated by the ACAP boards and the multi-stakeholders. This has created a different and more successful form of relationship between communities and government than that so often encountered elsewhere. In financial terms the scheme has been extremely successful. In return for government input of Can. \$6 million, in excess of Can. \$30 million has been generated from other sources, and it has been used to generate tangible environmental improvements which have been more wide-ranging than might at first be expected from the Program's initial

objectives. The coastal environment has been conceived in broad terms and it is hoped that the greater contact developing between various community groups will foster linkages to other aspects of community development.

If ACAP is set into a wider context, the harsh economic background against which the Program is operating has proved to be one of the main constraints on its effectiveness. The traditional fishing industry of the region has been suffering a pronounced decline in catch size, and quantitative restrictions upon catches were imposed under the 1994 TAGS five-year programme. The quotas for groundfish were halved in 1994, a significant reduction for a region in which half of the 15,000 regular fishermen derive an income from groundfish. The impact upon shore-based workers in processing plants has also been great (Chantraine, 1993). In the first year of its operation 38,000 people qualified for benefits from TAGS, though alternative job creations have been very limited despite the efforts of the Atlantic Groundfish Agency and the federally-funded Atlantic Canada Opportunities Agency (ACOA). Clean-up campaigns associated with old processing plants and restoration of coastal fish habitats have yielded only a few hundred jobs rather than the expected 2,000. In this harsh economic climate, environmental projects have not been uppermost in the minds of many communities. Meanwhile, some new opportunities, notably aquaculture, supported in Nova Scotia by the 1993 Aquaculture Act (which introduced a Can. \$35 million five-year plan to turn it into a Can. \$75 million per annum industry), have provided a little employment but have the potential for producing new environmental problems.

Another potential problem is the presence of other community-based schemes that may conflict with or overlap with ACAP. This is certainly the case in New Brunswick where, in 1991, the Departments of Environment and Municipalities, Housing and Culture established a Commission on Land Use and the Rural Environment (CLURE) "to recommend policies to protect and enhance the quality of our rural environment while fostering sustainable economic development and responsible uses of our resources". Meanwhile, the provincial Department of Natural Resources and Energy has designated watershed regions for which land use boards could be established. It is not clear how this and similar schemes in the other three provinces might impinge upon ACAP, either by reinforcing it, providing confusing duplication of effort or creating conflicting objectives. Given the overlapping federal and provincial jurisdictions there are potential conflicts between projects organised by different authorities.

Despite this, ACAP is making a distinctive impact on environmental management in its chosen areas. Direct action to improve environmental conditions is occurring, networks of local volunteers are being established and the basis is being laid for more widespread

community participation in both management and direct action. This suggests that certain criteria regarded by planners as the keys to successful growth of community participation and control of development are in place, including the move from dominant support by an outside agency (Environment Canada) to agenda setting by local interests under the guidance of a facilitator (the ACAP group co-ordinator) (Ashton et al., 1995; NRTEE, 1993). The combination of 'top down' initiation from Environment Canada and 'bottom up' leadership from the ACAP co-ordinators is forging a new approach to tackling complex problems in specific coastal, estuarine and riverine environments. Potential for a longer lasting community-based approach to environmental and other local management issues has been developed. The key to releasing the potential lies in the actions (and funding) associated with the completed comprehensive environmental management plans. If there is sufficient public and private-sector funding to implement the plans there is the prospect of significant environmental improvements being generated in the thirteen ACAP areas not to mention the possibility of ideas and actions spreading to other parts of the region.

### Acknowledgements

I am grateful to the Department of International Trade and Foreign Affairs, Canada, who funded the field-work upon which this paper is based. I was greatly assisted by Jim Ellsworth of Environment Canada, the co-ordinator of the ACAP scheme, and by the co-ordinators of the ACAP groups in my three study areas, Brenda Penak, Stephen Hawboldt and Robert Rainer. At Mount Allison University, the Department of Geography and the members of the Rural and Small Town Research & Studies Programme provided very useful input to the research, as did Susan Robinson who assisted with the interviews. The figure was kindly drawn by Debbie Millard.

### References

- Arnstein, S.R. (1969) A ladder of citizen participation, *Journal of The American Institute of Planners*, July, pp. 216-24.
- Ashton, W., Rowe, J. and Simpson, M. (1995) Lessons for planners: facilitating sustainable communities through partnerships. *Plan Canada*, November, pp. 16-19.
- Chantraine, P. (1993) *The Last Cod Fish: Life and Death of the Newfoundland Way of Life*. Outremont, Quebec: Robert Davies Publishing.
- Countryside Commission (1991) *Countryside community action: an appraisal*. Cheltenham: Countryside Commission, CCP 473.

- Environment Canada (1993a) *Atlantic Coastal Action Program. Volume 1, Sharing the Challenge: A Guide for Community-based Environmental Planning*. Dartmouth, Nova Scotia: Environment Canada.
- Environment Canada (1993b) *Atlantic Coastal Action Program. Volume 2, Community Environmental Profile: A Workbook for use in ACAP Project Areas*. Dartmouth, Nova Scotia: Environment Canada.
- Environment Canada (1994) *Ecosystem Initiatives in Environment Canada: A Synopsis*. Ottawa: Environment Canada.
- Environment Canada (1995) *Guiding principles for Ecosystem Initiatives*. Ottawa: Environment Canada.
- Friedmann, J. and Weaver, C. (1979) *Territory and Function: The Evolution of Regional Planning*. London: Edward Arnold.
- Hannan, D.F. (1979) *Displacement and development: class, kinship and social change in Irish rural communities*. Dublin: Economic and Social Research Institute.
- Hawboldt, S. (1995) 'Clean Annapolis River Project', Unpublished paper presented to the Annual Conference of the Atlantic Coastal Action Program, Corner Brook, Newfoundland, August 24-27.
- Martin, S. J. (1995) Partnerships for local environmental action: observations on the first two years of 'Rural Action for the Environment', *Journal of Environmental Planning and Management*, 38: 149-64.
- National Round Table on the Environment and the Economy (NRTEE), (1993) *Building Consensus for a Sustainable Future: Guiding Principles*. Ottawa: NRTEE.
- Rees, R. (1995) *St. Andrews and the islands..* Halifax, Nova Scotia: Nimbus Publishing.
- Robinson, G.M. 1992 Local development initiatives in Australia. In Bruce, D. and Whitla, M. (eds) *Community-based approaches to Rural Development*. Sackville, New Brunswick: Mount Allison University, pp. 235-56.
- Steifel, M. and Wolfe, M. (1994) *A voice for the excluded: popular participation in development*. London: Zed Books.
- Stohr, W.B. (ed., 1990) *Global challenge and local response: initiatives for economic regeneration in contemporary Europe*. London and New York: Mansell.
- Varley, T. (1991) On the fringes: community groups in rural Ireland. In Varley, T. Boylan, T. and Cuddy, M. (eds) *Rural crisis: perspectives on Irish rural development*. Galway: Centre for Development Studies, University College, pp. 48-76.
- Wilkinson, K.P. (1991) *The community in rural America*. New York: Greenwood Press.

