

AKKESHI: A SMALL TOWN'S COASTAL ZONE MANAGEMENT CHALLENGES

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Introduction

Until recently Japan had no single law that delineates the framework for integrated coastal zone management (ICM), although several authorities at multiple levels have jurisdiction over certain aspects of the coastal zone through various laws and acts. The Ministry of Land, Infrastructure & Transportation and individual prefecture governors hold much of the power in this system, whereas the role of local governments in coastal governance is limited (Someya, 1995). Under Agenda 21 (UN 1992), the Basic Ocean Law, enacted in 2007, establishes a plan for implementing ICM, yet much remains to be accomplished before ICM is implemented in practice.

This interview-based study of the coastal town of Akkeshi in the northern part of Japan examines what a local government can achieve through its environmental policies to conserve a coastal zone environment in the absence of an ICM system.

The Framework: The Role of Local Governments in Coastal Sustainability

Agenda 21 emphasizes that consultation and consensus building at the local level are critically important to achieve the goals of supporting, extending, and improving existing local institutions' ability to provide capacity building and local environmental management. Policy integration, revitalization of local communities through improving the environment, citizen involvement in policy making, and networking among local governments should also be incorporated (Teranishi, 2002). Local governments must have sufficient revenue and power to be effective in implementing environmental policies as part of a regional program, but that has been difficult to achieve (Sawai, 1994).

Kakizawa (1994) studied a river basin forestation project in the town of Bekkai, near Akkeshi, and found that the role of local government and its master plan are crucial in promoting environmental conservation based on a long-term strategy. In this town, the issues included understanding the relation between land use and fisheries resource conservation, the participation of stakeholders (of cattle farmers in particular), and public investment in environmental facilities in farming communities.

The principles of successful ICM (Olsen et al., 1997) and these recommended actions are shown in Fig. 1. They will later be used as the framework to view the environmental policies of Akkeshi.

Evolution of Environmental Policies in the Town of Akkeshi

Akkeshi's environmental policies have evolved over time, from the water pollution control measures in the 1970s and 1980s, to indirect measures such as forest preservation in the 1990s, to the current precautionary approach (Fig. 2). The strategy for addressing Akkeshi's environmental issues can be divided into four main periods as follows:

- ◆ Period I (mid 1970s): Regulation against water pollution
- ◆ Period II (the 1980s): Enhancement of water environmental protection
- ◆ Period III (the 1990s): Conservation of Akkeshi Lake watershed area
- ◆ Period IV (2000–present): Comprehensive environmental management

Even though it has taken positive actions and enacted these environmental policies, the town promoted the national government a dam construction in a branch of the Bekanbeushi River in 1997 as compensation for accepting live-ammunition exercises by the American military in a field at the town border. Construction of the dam proceeded until it was suspended in March 2003 because of substantial protests by conservationists, anglers, academics, and the Akkeshi Fisheries Cooperative, a group that was concerned about the dam's impacts on fishery resources in Akkeshi Lake and Akkeshi Bay.

Discussion & Conclusions

Since the 1970s, the focus of the town of Akkeshi's environmental policies has evolved from the 1970s from a broad regulatory strategy to a more site-specific one, shifting the approach from regulation to prevention. During this process, stakeholder involvement has increased, although further involvement is needed. The dam construction, for example, can be deemed to be a failure of consultation process among stakeholders.

Stakeholder participation in decision making is vital for the local government to establish mechanisms that can evaluate not only the environmental policies but also to improve upon them. Relevant institutions in the town have accumulated observational data on environmental quality and natural resources. Providing people with such environmental information in a user-friendly way can serve as a basis for stakeholders' involvement.

The town has been limited by a reduced budget, which resulted from recent financial reform implemented by the national government, and the town's jurisdiction is currently limited to the land portion of the coastal zone. Increasing the revenue and powers of the local government is, therefore, a challenge for Akkeshi to implement environmental policies for coastal conservation. Strengthening the partnership with the Fisheries Cooperative, an organization that is legally endowed with marine stewardship, will help the town further promote coastal conservation.

The town must also further involve townspeople in their environmental actions because their recognition and appreciation of a sound coastal environment is indispensable. Citizens' capacity building is the next step in extending and implementing the town's environmental policies.

To build the capacity to develop a more participatory approach in addressing the coastal zone, I suggest that the local government, in cooperation with citizens, constructs an environmental database that provides information about the coastal environment and enables consensus building among the stakeholders.

References

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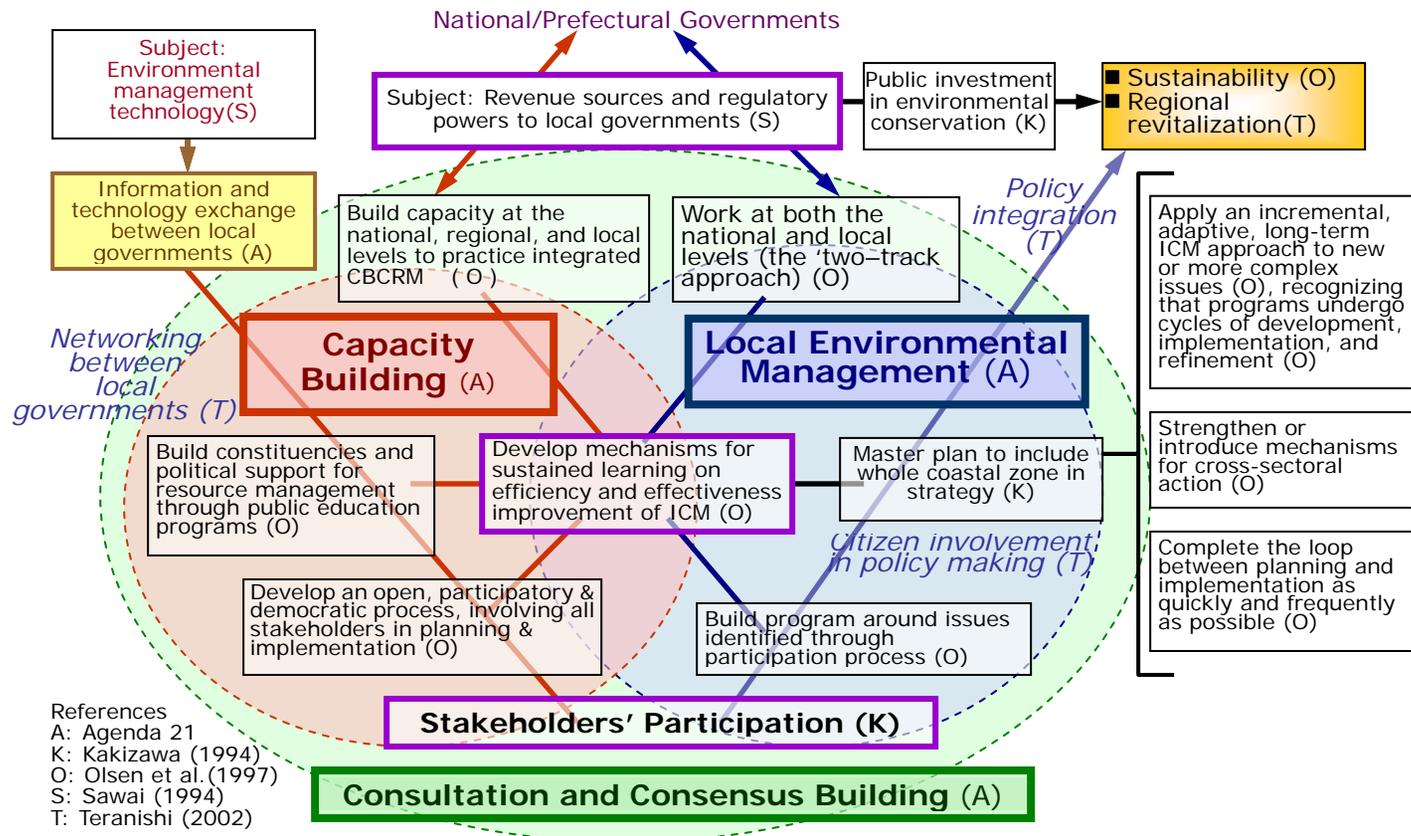


Fig. 1 The role of local governments in coastal sustainability

| Legal History World/Japan/Hokkaido | Major Environmental Measures taken for Coastal Conservation by Akkeshi Town | |
|---|---|---|
| <p>The 2nd Hokkaido Development Master Plan (HDMP) 1963-70 (Hokkaido)</p> <p>1970 14 pollution control acts enacted (Japan)</p> <p>1971 Environmental Agency of Japan set up (Japan)</p> <p>The 3rd HDMP 1971-77 (Hokkaido)</p> <p>1973 The first oil shock</p> <p>New HDMP 1978-1987 (Hokkaido)</p> <p>The 5th HDMP 1988-1997 (Hokkaido)</p> <p>1992 UNCED/AGENDA 21 (World)</p> <p>1993 Environment Master Act (Japan)</p> <p>1994 Environment Master Plan (Japan)</p> <p>1998 The 5th National Development Master Plan (Japan)</p> <p>The 6th HDMP 1998-2007 (Hokkaido)</p> <p>2000 The fourth AT Master Plan</p> <p>2001 Forest/Forestry Master Act (Japan)</p> <p>2003 Dam construction in AT called into question</p> <p>2005 Dam construction cancelled</p> | <p>Water Pollution Control</p> <p>1973 Water Pollution Control Committee</p> <p>1975 AT Pollution Control & Environmental Conservation Ordinance; Pollution Control Council</p> <p>1989–1990 Pollution Control Agreements with a golf course company (1989) and a sardine meal company (1990)</p> <p>1992 Bekanbeushi/Homakai River Basin Conservation Council set up</p> <p>1994 Pollution/Environment Citizen Patrol system set up</p> <p>1997 Soap purchase subsidy started</p> | <p>AT: Akkeshi Town AL: Akkeshi Lake BW: Bekanbeushi Wetlands</p> <p>Forestation</p> <p>1981 Annual purchase of woodlands in the Homakai river catchment area started</p> <p>1991 Municipal-Forest Profits Share Ordinance enacted</p> <p>1993-95 Municipal forests proposed?? to environment conservation</p> <p>1994 Broad-leaf tree plantation started</p> <p>2000 The town started Citizens Forestation Project; Municipal forest designated to conserve water and soil</p> <p>Procedures, Planning & Education</p> <p>1992 Akkeshi Comfort Town Plan set up</p> <p>1993 AL/BW Ramsar Registration</p> <p>1995 BW Nature Center</p> <p>1997 Fellowship to promote scientific research for AL/BW started</p> <p>1998 Annual Lecture on Environmental Issues started</p> <p>2000 ISO14001 Certificate Environmental Management System implemented</p> <p>2002 AT Environment Ordinance enacted</p> <p>2006 AT Environment Plan Citizen committee</p> <div data-bbox="1373 477 1696 634"> </div> <p>Left: Oyster farming in Akkeshi Lake Right: Bekanbeushi Wetlands</p> |

Fig. 2 Evolution of Environmental Policies of Akesshi Town (based on interviews and published literatures)