

## EXECUTIVE SUMMARY

Watershed management on Pohnpei evolved from a conflict situation between communities and the state government over establishment of a Watershed Forest Reserve and authority over management of the area. Today, management can be characterized by a collaborative approach in which all parties work to manage this threatened area. This case study looked at three key areas: 1) it analyzed the evolution of watershed management on Pohnpei and pinpointed significant crossroads; 2) identified lessons learned, including successful strategies and their attributes; and the roles of different organizations and parties; and 3) examined the current situation, particularly challenges facing management, and devised appropriate recommendations based on comparative collaborative and community-based case study analyses. Analysis was based on literature review and field research in which over 40 interviews were conducted with community members, traditional leaders, state agencies, non-governmental organizations, U.S. federal agencies, municipal governments, and politicians. The results of this case study analysis provide clear lessons for the watershed management program as well as other programs and projects facing similar challenges and issues.

### **Key Findings: Significant Crossroads**

The following events were identified as key crossroads for watershed management on the island.

- *The Extension Program and Education Campaign with Communities* opened the door to developing relationships and providing opportunities to overcome mistrust between the different parties. The creation of the Watershed Steering Committee (WSC) also improved coordination of watershed management activities.
- *The Asian Development Bank Grant* allowed testing of new approaches and strategies for watershed management, particularly for developing community-based approaches. However, these years also created large expectations on the part of communities as well as loss of focus and direction for the WSC. Public awareness expanded to gain support of the general populace for watershed management activities.
- *Governor Rejects Revised Rules and Regulations for Watershed Management Devised by the WSC and Communities*, leading to return of mistrust between the state and communities as well as dissolution of the WSC. Watershed management efforts lose cohesiveness and coordination, with different parties pursuing separate approaches and strategies.
- *Natural Disasters* experienced on the island raise public awareness concerning the threats facing watershed areas and consequences of their destruction.
- *Development of Local Capacity* through creation of a local, non-profit conservation organization and developing legislation with municipal governments strengthens watershed management on the island.

## **Key Findings: Major Observations and Lessons**

The following are key lessons learned during the 16 year history of the program. These findings can also serve to provide lessons for other programs facing similar challenges and issues.

- *Approaches are Varied and Both Top-down and Bottom-up.* Watershed management involves both the state as well as communities working together. Communities need to direct the process and identify issues themselves. Multiple strategies must be used to make progress as there is no one approach.
- *Build on Existing Foundations* as creation of new institutions and processes, particularly within communities, only creates confusion and upsets power balances.
- *Recognize how People Learn in a Way that has Meaning to Them and Fosters their Ownership and Commitment.* Working together to address issues and problems requires developing trust and understanding between all parties by recognizing the human relationship aspect of collaboration. It also means understanding how people can learn together in ways that addresses their interests meaningfully, thereby fostering ownership of the problem and process.
- *Assess Strategies, Activities, Incentives, and Motives.* Spending more time assessing strategies, activities, incentives, and motives is critical for efficacy. Examples include insuring institutions, processes, and activities are accountable and have legitimacy to all parties involved and avoiding financial compensation to participants as it attracts participation for the wrong reasons.

## **Key Findings: Achievements and their Attributes**

Perhaps the most telling impact of the watershed management program is that all interviewed (non-supporters included) responded that if not for the watershed management program, watershed areas on the island would be either completely destroyed or damaged more severely. The following outline some of the other key successes, and related attributes, of the program:

- *The Grow Low Campaign* showed communities that sakau could be grown successfully in the lowland areas. Success can be attributed to key leaders within communities adopting the practice as well as efforts by The Nature Conservancy to provide nursery grown plantings to communities, allowing them to experiment with the new planting style.
- *Awareness of the Issues* is prevalent on the island due to education efforts focusing on the importance of watershed areas and threats.
- *Gain of Community Support for Watershed Activities* as a result of community outreach and attempts to develop co-management approaches to watershed management.

- *Behavior Changes* can be seen in movement of sakau plantings from the upland forests to lowland areas, clearing of pig pens and latrines near streams, and clean-up efforts in villages.
- *Adoption of Community-based Approaches within State Activities and Innovative Strategies* is more prevalent.
- *Involvement of Key Individual*, director of The Nature Conservancy on Pohnpei, was cited most frequently as a critical attribute of the successes outlined due to his unique expertise and commitment.

<p><b>Key Findings: Roles and Challenges of Organizations and Parties</b></p>
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Questions concerning appropriate roles for the various parties were asked of participants. The various roles outlined provide insight into collaborative approaches and elements needed for efficacy.

- *Division of Forestry* was seen by many as an institution that should provide technical assistance as well as play an advisory role. They were also seen as critical for enforcement. However, given the lack of leadership and capacity, such roles are heavily hindered, thus leading to dependency on the non-governmental organizations.
- *Non-governmental Organizations* were also seen as providing technical assistance as well as an advisory role. They were seen as particularly effective in capacity-building and fundraising.
- *Municipal Governments* were seen as a substitute for addressing the ineffectiveness of the state in managing watershed areas as well as the state's reluctance to devolve management to community levels. The strengths of the municipal governments were their close ties to communities and passage of legislation adopting co-management approaches to natural resource management. Deficits included lack of funds and capacity to implement legislation.
- *Traditional Leaders* were seen as key figures for successful watershed management. However, the efficacy of traditional leaders depended largely on the individual, leading to issues with support and capacity regarding management.
- *Communities* were seen as implementers of management. However, it must be noted that this role was seen mainly by NGOs and state agencies. Communities expressed interest in co-management; however, capacity issues as well as quality of participation prove challenges for sustainability.
- *Ways of Working Together to Manage Watershed Areas and Improving the Collaborative Process*. All parties interviewed agreed that everyone must work together to manage the watershed. Overlap of responses on roles and responsibilities differed so that no one approach was identified. However, responses tended to fall into three categories: 1) municipal governments, the state, and traditional leaders should share management and enforcement roles; 2) municipal governments and traditional leaders should fulfill management roles;

and 3) the role of the state should be to consult with traditional leaders on management of watershed areas. Improving coordination of activities and communication between parties was identified as critical ways to improve the current collaborative process.

### **Key Findings: Involvement of Parties**

The following identifies how parties came to be involved with watershed management efforts as well as why they continue to be involved. These findings provide insight into future strategies on how to engage other parties as well as maintain continued involvement for sustainability.

- *Education Campaign through the Extension Program* was the key activity noted as people's first introduction to watershed management efforts on the island.
- *Parties Continue to be Involved for Benefits.* Though various reasons were provided, the overriding theme to involvement concerned benefits (e.g. protection of sacred places, protection of the water supply and quality, provision of information to others on how to protect their natural resources and serve as advisors, conserving for future generations, etc.).
- *Parties Enjoy Being Involved because it Provides them with Learning Opportunities and Skill Development.* This applied to both personal as well as professional areas.
- *Challenges Concerning Involvement were Varied.* Aside from being chased out of villages early on in the program, other challenges were: enforcement issues, dealing with people unwilling to listen, the slow nature of the process causing frustration, and involvement of politics.

### **Key Findings: Steps in Moving Forward**

Parties were asked what needed to happen in the next five years to improve watershed management on the island. These findings reveal levels of support for certain strategies and approaches, thereby helping to direct future management activities.

- *Laying Down the Watershed Forest Reserve Boundary Line.* Marking the boundary for the Watershed Forest Reserve was seen as critical for enforcement and conservation of the area.
- *Improving Coordination, Planning, and Relationships* among different parties and activities is a major challenge and responses overlapped for the need to address these issues.

## **Key Findings: Five Key Challenges**

Challenges, both current as well as future, facing effective watershed management on the island were identified as follows:

- *Enforcement.* Issues concerning enforcement centered on creating an effective process with concerns revolving around how enforcement would be conducted, funding sought, and authority and responsibility for enforcement of the Watershed Forest Reserve clarified.
- *Building Capacity in Both Communities and the Division of Forestry to Co-Manage.* In participatory management approaches, new skills and understanding must be developed in parties to undertake new roles and responsibilities. As such, communities and the Division of Forestry must develop capacity to engage effectively in collaboration.
- *Developing Political Will for Participatory Management and Commitment to a Collaborative Approach* addresses the state's lack of commitment, through adoption of participatory management legislation, to recognize communities (and others) as a legitimate party in watershed management.
- *Increasing Communication Between Groups and Improving Overall Coordination* encompassed strengthening of leadership roles for coordination, management, and implementation, clarifying roles and responsibilities of the different parties involved, and developing a coordinating structure that enhanced communication between parties and coordination of activities.
- *Mitigating Outside Influences* was seen as critical. This challenge mainly involved a shift to a cash economy and subsequent erosion of traditional lifestyles and customs. Finding alternative income generating activities to counter commercial sakau farming is key to addressing this challenge.

## **Key Findings: Conclusion and Recommendations**

Six factors that underlie effective, collaborative natural resource management were identified. Each factor was linked with specific recommendations and steps the watershed management program could take. The six factors are:

- *Commitment to a Collaborative Approach at Multiple Levels is Present.* Such commitment is built on understanding of the issues and a need for a collaborative approach that is identified by all parties involved.
- *Appropriate Incentives are Evident at Multiple Levels.* For Pohnpei, incentives are rooted in enforcement, personal benefits, resource benefits, and ownership of the problems and process to address issues.
- *Capacity Exists at Multiple Levels.* Capacity includes educating parties to develop understanding of the need for capacity to address issues.

- *Accountability Measures are Incorporated.* Accountability addresses not only the work being done, but also of the parties' commitment to the collaborative and as representatives of their constituents. Accountability is enhanced by clear measures for encouraging accountable involvement; when goals are clear and accepted; and when roles and responsibilities of involved parties in achieving these goals are identified.
- *Coordinating Structures that Manage and Sustain Productive Interaction are Present.* Coordinating structures provide mechanisms for parties to develop relationships and trust, maintain communication and be well-informed, develop consensus on problems and strategies, ensure accountability, and monitor activities to provide feedback for adaptive management.
- *Long-term Perspectives and Adaptive Management Approaches Have Been Adopted.* In looking at sustainability of initiatives, long-term perspectives and adaptive management are factors that encourage efficacy as parties maintain relationships, shared visions provide motivation, and strategies adapt to new challenges and situations.