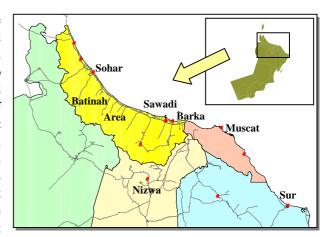
Lessons Learned from Mangrove Ecosystems

Part 3: Expert mission to Oman

Since April 2000, AAI's expert has been working with the Ministry of Regional Municipalities, Environment and Water Resources of Oman to support mangrove plantation activities for the restoration of coastal vegetation. Prior to the involvement of our expert, the Ministry had once tried to plant mangroves (*Avicennia marina*) in the region of Barka along the Al Batinah coast in 1997, but this project failed due to a storm combined with a high tide, which washed away the planted mangroves before their roots became established. At the same time, in the country's conservation and development planning there had not been any specific scope of activities for mangrove plantation. Therefore, the first work that our expert



conducted was to visit the main mangrove forests and creeks to understand the current status of the mangroves and he produced a report, based on which discussions with the Oman government were started.

The original request from the government to construct a seedbed in an appropriate place, grow seedlings and plant them in appropriate locations, turned out to be a very vague idea on their side. They simply wanted to "green" as many creeks and coastlines as possible with mangroves. While there was this overall goal, they did not have any specific proposals or suggestions as to how to achieve their aims. Nevertheless, with our involvement, a seedbed with pump irrigation system was completed in August 2000 and seedling production was started.

While mangroves have positive functions for the environment (e.g. they act as a nursery for aquatic creatures and help conserve biodiversity), they also have negative factors for human livelihood (e.g. increased mosquitoes, a foul odor from the mud, etc.), so they cannot be planted simply anywhere for the sake of greening places. Therefore, a certain basic plan or guidelines were necessary. While trying to plant mangroves the most important thing is to consider how we should answer the simple questions the neighboring local people would ask: "Why do you plant trees here?" "What good does it do?" Answering such questions properly is nothing but an act of environmental education. And educating people is a time-consuming and laborious task. This is true everywhere, be it in Japan or in Oman.

Anticipating environmental educational effects, from the first plantation activity in Sawadi Beach we mobilized labor from the surrounding local communities, hoping, that they would not destroy the forest they themselves planted! In the following year we gathered the same laborers. In the first year they did not quite understand our answers to their simple questions as to why they had to plant trees. In the second year, however, when we heard such comments as "these days, as the trees have grown, more birds and fish seem to be around" we felt that they could act not only as laborers but also as environmental monitoring staff. Earlier their temporary salary was paid from our local expenses, but from the third year the environmental ministry took on the cost. Maybe they understood that it was less costly to use local labor than commission a private company after bidding, and that the local people were capable of learning the job.

What we have learned thus far is that, if we build up a good relationship with local people, and if they can realize the benefit of plantation, whether in the form of cash income or increased fish resources, they, themselves, will take over and continue management of the mangrove forest (though of course the government should provide proper support as well). Only with such government-local citizen collaboration, can mangrove plantation in Oman be a sustainable undertaking.



Second plantation activity, Al Sawadi, February 2003



Second production at the seedbed, October 2002