

7. PEOPLE'S PARTICIPATION

Since the social structure of Vedalai differs from the one in Chinnapalam, the evaluation of people's participation in each village has been kept separate.

7.1 Chinnapalam

Chinnapalam, together with Thoppukadu, forms one village *panchayat* (council), with one president as *panchayat* leader. Chinnapalam is 100% Hindu and has a population of about 700 people. Almost all its men are engaged in fishing. The women are involved in seaweed collection and carrying fish to the market.

It was very easy to form a seaweed committee here. The committee leader, who also worked as a watchman, organized the committee well and problems within the committee were rare. Women in Chinnapalam knew how to stand up for their rights, which made the committee meetings lively and straightforward. All participants were involved and everyone had their own farm unit to take care of. The seaweed farming trial was well accepted by the other villagers and severe vandalism never occurred.

Motivation of the participants was excellent, but could be partially explained by the subsistence allowance of Rs. 20 per day which was given to them for their work at the farms. This explains also their anger and protests when they were told that the project had to be terminated. They understood that it was no use continuing farming if seaweed would not grow, but they requested a large sum of money as compensation, which, of course, could not be given.

The "subsistence allowance" to participants was justified on the grounds that it would be difficult for people to take time off from their daily activities to work on the seaweed farms; most of them would lose income by doing so. In retrospect, this approach was ill-advised, since it led to the participants viewing the project as a welfare scheme. Even when it became obvious that seaweed farming would not succeed, the villagers were loath to give it up since their participation was providing them with some cash income. Whether or not participation would have been adequate on a purely voluntary basis will forever remain a moot point.

7.2 Vedalai

The population of Vedalai is around 6000, of which 60% is Hindu and 40% Muslim. The *panchayat* leader was considered to be a very powerful and influential person by the people in Vedalai as well as in surrounding villages. It was a matter of course that the *panchayat* leader also became the leader of the seaweed committee. The Hindu-Muslim ratio in the committee was fifty-fifty. Among the 25 participants (8 women and 17 men), there were also some influential seaweed agents, who, like the leader, never worked in the project but had someone working for them. The women had never been involved in seaweed work before, but they took to it quickly. The watchman, who took care of the spore setting shed, soon developed as an excellent organizer and planner.

The committee meetings were dominated by the committee leader and the agents. The female participants were usually rather reticent during these meetings. There was a lot of self-interest on the part of the committee chairman and the agents, which led to several confrontations between **BOBP staff and the leader.**

On a few occasions, the seaweed farms were damaged by push net operators from outside Vedalai, but there were never serious problems. Seaweed farming was accepted by all the villagers. Actually, more people wanted to join the project once it had started operating.

The announcement of the cancellation of the project disappointed the villagers, but there was less aggression and anger from their side than there was in Chinnapalam. This could be explained by the existence of a strong committee leader. The land on which the project shed had been built was his property and, automatically, the shed would be under his supervision once the project was terminated. The leader was satisfied and, therefore, the villagers too.

7.3 *The Community Development Worker*

A Community Development Worker was appointed by BOBP in October 1987 during the first phase of the project. Her main function was to motivate and organize the participants of the seaweed project in both villages. She also looked into other income-generating activities and organized palm leaf weaving training in Thoppukadu, the village close to Chinnapalam. Another important role she played was to facilitate communication between BOBP staff and the villagers by acting as an interpreter.

The role of the motivator was an important one and it helped to make the organizational part of the project a success. If the technical problems had not existed, many of the participants would have been able to manage their own seaweed farm after three years of experience.

8. **REFLECTIONS**

The negative outcome of this pilot project in terms of seaweed production serves to emphasize the high risk incurred when even a seemingly simple organism, such as *Gracilaria*, is introduced into an alien environment. The offshore islands, the natural area for *Gracilaria* seaweed, would have been a better place to conduct culture trials. The inability to undertake pilot projects there reflects the conflict between preservation and development. Seaweed farming would be compatible with the 'biosphere' concept in which conservation and ecologically 'safe' development are reconciled. As far as is known, seaweed farming appears to be benign in its environmental impact. This is particularly true if spore setting can be employed in seed farms. Very little seedstock is required for this technology. Furthermore, seaweed farming will conserve the natural resource, which is now severely overharvested around the islands.

Open-water culture of *Gracilaria* by vegetative propagation has been commercially successful in St. Lucia in the Caribbean (Reynard and Smith 1986). Selection of the culture site and fast-growing plants were the keys to the success of that project. Clearly, more trials are required at alternative sites if a definitive conclusion on the viability of seaweed farming in Tamil Nadu is to be drawn. Small experiments were undertaken within relatively short timeframes by several research institutions at the same sites where BOBP set up its trials (Chennubhotla *et al.* 1986, Rao 1974). While such work is essential from a scientific point of view, the assessment of commercial feasibility requires both long-term trials and sufficient production capacity to evaluate economic, social and technical costs.

On the positive side, the trials clearly showed that fisherfolk are capable of implementing the technology of *Gracilaria* culture. All aspects, including spore-setting, vegetative propagation and work management were capably managed by the participants.

Socially, seaweed farming could be viable if the seaweed farmers organize themselves as they had done during BOBP's farming trials with the help of the motivator. But there will be other problems to solve, such as the dependence of the seaweed farmers and collectors on the agents and arranging loans for the initial investment on seaweed farming.

As an alternative to culture, resource enhancement strategies may be attempted. One example would be substrate enhancement, wherein vegetative cuttings are tied to stone blocks placed on the seafloor in the vicinity of natural seaweed beds (Fisher, personal communication),

Experiences with the people of Chinnapalam and Vedalai would seem to indicate that group action for a common goal is possible. Perhaps this could be a basis for better management of natural *Gracilaria* stocks through education and demonstration of improved harvesting methods and eventual implementation of a people-based resource management programme. In any event, it is clear that unless culture or management measures are undertaken, this important resource will continue to decline, depriving the coastal dwellers of Ramnathapuram of their most important source of income.

As already mentioned, other alternative income opportunities are limited in the coastal villages of Ramnad District. People earn a living out of fishing, seaweed collection and, in the case of a few, from their own coconut estates. Agriculture is difficult, since it is too dry and the soil is not fertile. At any rate, few fisherfolk own land. To increase the income of those fisherfolk communities, opportunities in fishing, seaweed collection or aquaculture need to be found.

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A list of publications in print follows. A complete list of publications is available on request.

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