

## **Noumea seminar on water management in islands, coastal and isolated areas**

**A PECC international project, Nouméa, New Caledonia, 26-29 May 2008**

### **Conclusion and follow-up**

The Noumea seminar on water management in islands, coastal and isolated territories is part of the PECC international project initiated by FPTPECC in cooperation with the World Water Forum. This PECC project has received support by PECC Members economies that have an extensive coastal territory and are confronted with issues related to water quality or water scarcity.

The growing demand for water has become one of the most pregnant environmental issues worldwide today; issues related to access to natural sources of water are not limited to PECC economies but PECC has a major role to play in addressing these issues given its transpacific membership. Issues related to Islands territories, coastal regions and isolated communities were not addressed at the Mexico Forum ; in contrast the World Water forum has acknowledged the vulnerability and the particular needs of small islands countries.

All users, being private, industrial, agricultural, are confronted with the need to move towards more efficient and more secured water consumption worldwide. The issue is global but islands and coastal territories deserve a more special attention. Their fragile environment needs to be protected namely in relation with issues related to climate change, specific sanitary risks and industrial use of the resource, specially in the mining industry, likely to lead to an overuse of the resource and to potential pollution of the environment.

Although the island and coastal territories share a number of problems in common with all countries in the world, the Bora-Bora meeting has showed the many ways in which they differ from others.

The ability of the islands to tackle water scarcity is constrained by their size, their vulnerability to climate change and natural disasters, but also by the cultural tradition of their populations. In addition, together with the coastal territories they have to deal with a specific partner which can be an asset or a source of trouble: the vicinity with the ocean. Ocean is the ultimate water resource, and at the same time, it could obliterate the fresh water resource stored underground or in the water lens.

It was made clear in Bora-Bora that we have to think about water cycle as a all and not only refer to fresh water, particularly in relation to the presence of lagoons. The Bora-Bora case is the perfect example of an integrated water management program: desalination, sewage treatment, reuse of water, preservation of the much celebrated lagoon, and incidentally, access to renewable energy from the ocean.

The Noumea seminar was organised to pursue the work initiated in Bora Bora in preparation for the Honolulu seminar to take place in November 2008 when Guidelines for a better water governance will be prepared for endorsement by the World Water Forum which will gather the UN Nations Member countries in Istanbul on March 2009.

### **Bora- Bora and Noumea seminars: a stocktaking analysis**

The first two seminars have conducted a stocktaking analysis on how to fight water shortage.

Firstly experts have identified sources of potential overuse or misuse of water in island and coastal territories.

- Higher demand for water in agriculture or mining may result in potential scarcity for individual use and also increase pollution of the water rejected in the lagoons with severe adverse effects on fish farming.
- With regard to mining water is being used on temporary basis but pollution effects are more likely to contaminate the soil and the rivers on a long period of time even after mine closure.
- The lack of sanitation and the low level of sewage treatment in several large coastal cities were identified as a source of concern.

Second, experts have identified techniques and best practices to fight pollution and save the resource:

- Need to increase sanitation to compensate the low level of treatment in many coastal regions in the world.
- Develop the reuse of water in agriculture, street cleaning, watering of golf courses, sanitary water for high rise buildings, given that the quality of the water is save for animals and human beings. Reuse of water at the domestic level, as already available in a limited number of cities worldwide, will depend on the cultural approach of the local population and its level of acceptance.
- Develop desalination processes at the decentralised level to serve both large and small communities with special care to avoiding rejecting salt in the lagoons to protect the local species.
- Rain harvesting for private use to compensate water shortage
- Provide for a more efficient use of water: metered water and fight against leakages which can go up to 75% in some Pacific Islands

### **Towards best practices for a better water governance**

Accordingly, taking into account those source of concern and having identified technologies available on the market, experts have judged that there is a need to set a guide of Best Practices in water management. In Bora-Bora they had already agreed on some basic issues that were again brought into light in Nouméa:

- 1) A real governance based on a strong legal framework discussed and endorsed by all stakeholders to the water management process, is badly necessary to protecting the resource, ensure its distribution and to set up a strategy that would allow to differentiate amongst users being human, industrial or agricultural.

2) Water crisis is perceived as a deficiency in water governance ; water governance deserves bringing together our forces to provide an adapted response to water shortage and water quality. They are also rights and interests linked to cultural and traditional structures within communities that have to be recognized. Effective partnership between all stakeholders must prevail : we need to build trust between all stakeholders. Governance should result from a collective consultation with the communities involved.

3) A pricing policy has to be implemented, balancing the fact that water is not a free good, but also an absolute need for people. In particular, pricing policies should better reflect the scarcity value of water and discourage overusing the resource, but at the same time access to water for all should be granted as much as possible through adequate pricing policies ranging from administered prices to tradable rights.

4) A dialogue on climate change in relation with climate hazards, rise of water level in the Pacific islands, lower level of fresh water available from water lenses in low islands, was felt necessary.

5) Need to identify sound technologies, reliable, robust and of easy maintenance in the field of water sanitation and desalination which could be made available for small or remote communities at a reasonable price with a view to provide for safe drinking water and fight against risks of disease dissemination in the Pacific area.

6) Finally it was felt that sound environmental protection was needed to protect the fragile environment of islands territories and lagoons namely from potential pollution from industrial mining and low sanitation. From a high degree of environmental protection and regulation associated with a high cost to a low one with minimum requirements in mining sites, experts questioned the acceptable level of financial burden to operating companies.

### **The Honolulu meeting:**

To be held November 20-21 the Honolulu meeting organized in cooperation with the East West Center will possibly address the following issues in preparation for the Istanbul meeting of the World Water Forum:

- Cost analysis of the identified technologies in the field of water sanitation and water treatment with a view to proposing adapted technologies to end users ( small or large communities) in islands and coastal territories.
- Special attention would be devoted to bringing forward an analysis of the level of embodied energy in each technology to reducing the overall operational and usage costs for users.
- Identification of “best practices” to protecting the resource taking into account the necessity for preventive sanitation and the development of the use of recycled water to compensate water scarcity in regions under a severe water stress.
- Conditions allowing for a better water service management: ie efficient maintenance of equipment in island or isolated territories including provisions for avoiding water crisis and developing storm water management, as well as conditions for securing access to clean water to all in isolated and remote territories.
- Building on the previous PECC work (PECC Guidelines for effective Public Private Partnerships) it is suggested that a PPP approach would be retained when addressing these issues.
- The Honolulu meeting will allow for discussion of the draft text of the proposed Guidelines for water management which will be circulated for comment in advance for the meeting.