

Communication, Education and Public Awareness in Protected Areas West Asia and North Africa

Workshop Report September 13-14, 2002

Joint workshop organised by CEC with the WCPA
Wendy Goldstein Editor



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Contents

1Contents	3
Acknowledgements.....	4
Summary	5
The Workshop.....	10
Workshop introduction.....	11
IRAN - Local Community Empowerment for Mangrove Conservation	12
SAUDI ARABIA - Local community participation in the conservation and protection of the successful reintroduction of the Arabian oryx in the Uruq Bani Ma'arid Protected Area.....	15
KUWAIT - Protecting Desert Ecosystems of Kuwait, the Case of Sulaybia Field Station ...	17
BAHRAIN - Ecotourism and protected areas.....	21
JORDAN - Making it Pay – Dana Nature Reserve	25
MOROCCO - Reserve de Sidi Bougha –Partnership NGO Government for managing protected areas	28
Les Aires Protégées: Conservation, Education ou Ecotourisme - Quelle perspective au Royaume du Maroc ? La Réserve Biologique de Sidi Boughaba.....	31
LEBANON –Bridges for Conservation – Experience of an awareness campaign around four Protected Areas in Lebanon	38
Recommendations from the workshop	49
PAKISTAN: Keeping the Promise for Kirthar	51
Workshop Evaluation.....	56
Participants	57

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Summary

Twenty seven participants including members of the Commission on Education and Communication, CEC, and the World Parks Commission, WCPA, met to share experience of protected areas communication, education and public awareness in the northern Africa and west Asia region preceding the IUCN WESCANA¹ Regional Members Forum in Kuwait, September 2002.

Communication and education are essential instruments to raise support for and to contribute to the management of protected areas. The workshop heard some examples of the work being done in the region to introduce people to protected areas, to work with communities and to work in partnership.

These processes can take a long time as relationships are built and trust is developed as described in Iran and Saudi Arabia. In some countries protected areas are a new concept and much has to be done to develop pride and appreciation for their benefits and even to introduce the local people to the protected area. There is a rich variety of innovation in approaches and partnerships. In Jordan protected areas are managed by an NGO in agreement with the government and have become self sustaining financially following long and sustained effort to create income generation for communities, strong branding and quality experiences. A partnership between an NGO and a protected area in Morocco has resulted in an active educational centre and the relationship has enabled the NGO to raise funds internationally. In Lebanon, an NGO stimulated an innovative bottom up process to build awareness about the new national parks in the country and to put in place an approach that is sustainable.

This workshop, to exchange and reflect on experience, reflects IUCN's added value to work in the region, where knowledge sharing and reflection are encouraged between IUCN members and Commission members. The workshop also provided a step towards the World Parks Congress in Durban September 2003, where the results would be shared. This learning when shared by way of publication and web site will contribute to the Convention on Biological Diversity work programme on communication – education and public awareness, and that of the Protected Areas Programme under the Convention, to be discussed in early 2004. Recommendations made in the workshop will contribute to plans of the Commissions and the World Parks Congress.

It was recommended that a publication on the regions work be developed, expanding the number of cases. Only one additional case was provided, from Pakistan, from the mining sector, which describes efforts to build support for exploration in the protected area. While the case is included, its lessons are not incorporated in the overall results outlined below to keep this as a “report”, though they are of great interest.

Lessons

Institutional issues

A conceptual issue for the region is clarity on the difference between conservation and protection.

As well the word "park" suggests the notion of Hyde Park or an area for recreation and picnics, rather than conservation. Part of this recreation includes the idea of hunting and in fact in Kuwait bird hunting is legal all year round.

¹ WESCANA is an IUCN Region including the countries of West Asia (Lebanon, Jordan, Yemen Palestine, Saudi Arabia, Qatar, Oman, Bahrain, Kuwait) northern Africa, (Morocco, Tunisia, Libya, Algeria, Egypt) and Central Asia – Kazakhstan, Uzbekistan, Afghanistan, etc

In the region some of the bottle necks in protected area management include, low funding and donor awareness about the importance of dry land ecosystems, building on lessons learned from past mistakes, government awareness and legislation, project development and management.

One issue raised was a lack of seeds of plants to restore dry land ecosystems and the idea of setting up a cooperative sharing arrangement from larger countries.

As well protected areas near national borders need to consider communicating their initiatives to neighbouring countries so that their efforts are not undermined by developments across the border or nomadic herders.

Protected area management is largely about people management and capacity – not technical issues – and depends therefore on effective communication and education. Problems arise often as a result of poor communication. To have adequate resources allocated to education and communication, this work needs to be developed and integrated as a part of a national strategy, or protected area management plan.

It is suggested that to address the general lack of awareness on the need to conserve biodiversity, many countries need to address basic weaknesses in the existing system for delivering awareness programmes. Communication and education components of protected areas management could be strengthened by establishing long-term educational programs and by setting up informative Nature Centers around the Reserves. Each Reserve should have a full-time awareness specialist, guides well-trained in interpretation techniques, and a comprehensive set of educational material on the area. Cooperation with research institutions needs to be strengthened to make scientific data available and accessible for a broad audience. Local Awareness Committees – bringing together a number of civil society actors - could be established and become a permanent entity and linked through formal channels to the protected area management.

The experience of a participatory awareness campaign in Lebanon has provided an example of when a protected area management invests and gives value to the development of partnership and communication and education strategies they reap the benefits of increased community support for conservation.

Planning communication

Rather than plan communication in the office, undertake interviews with people first, or set up a local contact group, to reveal the main concerns and solutions that people suggest. Listen and assess to work out the dynamics of who can represent others at the start. You cannot assume that what worked well in one place will work well in another. A lot of homework is needed to understand the dynamics of the situation. Stakeholder groups and how to set them up does not follow a formula. In Saudi Arabia, one contact group to represent the local people was quite small, yet in another area, that model did not work well, as people did not trust the representatives.

Defining who you are communicating with

Different groups need different ways of communicating with them based on their interests and include a range from decision makers to local communities.

- Representation in stakeholder groups has to be carefully considered. The head of a tribe may agree but members of his tribe may not. Some groups easily select representatives, where as others have no trust of others at all. It can also depend on the issue whether all of the group or only part of a group may be adequate representation.
- Socio-economic studies are used to help identify the main stakeholders and the impact of costs and benefits of the protected areas.
- Creating stories and using illustrations can capture children's interest.
- School children and schools provide an institutional mechanism to easily reach a formative target group, however others thought "conservation begins at home" and parents need to be reached and responsibility lay with them rather than teachers.

Communication or education messages need to:

- be short, condensed and pointed for Ministers and decision makers; this takes time to prepare and including more than scientific arguments;
- short messages can be backed up with more substantive arguments – like a two page executive summary for a Deputy Minister;
- help make the decision easier by giving figures and consequences of decisions or no action;
- offer information about alternatives for action if community behaviour has to be changed particularly when it affects the livelihoods of the people, this means that the service or infrastructure has to be provided;
- motivation from economic incentives needs to be tested, planned and communicated to reinforce conservation messages informing people how they will be compensated for losses in economic benefits;
- communicating longer term benefits realised by the protected area are more difficult, and here examples from other regions need to be shown;
- education programmes need to be conscious of developing an impact on lifestyle and action at home and to make a connection with what people do at home.
- An argument for Protected Areas can be an increase in migratory bird populations, which in turn has a positive impact on the interest of the area for ecotourism.
- In Jordan the Dana Nature Reserve made the notion of limited access to the Reserve a marketing and promotional feature. Limited access is now associated with values of a place of quiet and peace and has strengthened the promotion of the area as a place for company retreats – an income generating activity.

Channels for communication

Communicators need to use effective and credible channels to deliver messages.

- The reputation of the people and the organisations is an important consideration in effectively transmitting a message- e.g. messages from heads of state are influential;
- Inviting high level people and using social events to launch initiatives raises the profile in society, attracts the media and builds awareness;

- Complicated issues in the region are resolved by referring these to people higher in the hierarchy to resolve;
- Intermediaries such as grazing unions or hunting unions can assist in communicating with "non organised" stakeholders;
- Local Awareness Committees were set up in Lebanon and provided protected area managers with a pool of trained human resources to conduct awareness activities, decreasing the cost of organizing awareness events, and facilitating the dissemination of information about the importance of the protected area to new audiences, and enhances communication, mutual respect and understanding between Protected Area Management and a large cross section the community and promoted a feeling of community identity with the Protected Area.
- Gaining access to even be heard by governments or decision makers can be difficult; in some situations using university people or NGOs can create an opening as governments are wary of their views, though this approach needs care;
- Practice how to present the message to get the point over effectively so that the opportunity is not lost;
- Using the mass media is an important means of drawing attention of decision makers to an issue;
- Holding a university workshop on issues can be a forerunner to making direct contact with the decision makers.
- Children can be effective protagonists for the environment, one prince said "I'll tell my brother that when he is King to make Bahrain beautiful". In Bahrain children had written to the newspaper following visits to protected areas to complain of rubbish dumping nearby.
- The intervention of an outside party like the Lebanon Environmental Information Centre and the support of national and international partners (Ministry of Environment, IUCN, GEF, UNDP) can act as a catalyst for initiating local awareness efforts.

Incentives

Community members are more interested to participate in awareness efforts if the Protected Area management has shown serious concern for the needs of the local community and is engaged in a continuous dialogue with local stakeholders; if they are considered and treated as full partners by the protected area management; if the awareness efforts of community members is supported by the protected area management team; and if sufficient training and awareness material has been provided.

Ecotourism provides a means to bring benefits from protected areas to local communities and countries however it needs to carefully consider the impacts on biodiversity. Monitoring of tourism impact and setting limits based on conservation criteria are considered essential. As some countries are small, the region could benefit from co-operation between countries to develop ecotourism packages to several. Protected Area benefits can include employment for the local people requiring an investment in the capacity of the people and the provision of infrastructure to provide opportunities – like markets or shops or food processing equipment. When people are negative to the prospect of the protected area, and their livelihoods seem threatened, it is essential to develop proof of benefits in order to involve them and to invest large

amounts of time in developing relations and winning support. As trust builds it is possible to involve the local people in planning.

Reflections on formal education

- While children and schools are a target of programmes and a channel frequently used, many felt that parents have to be reached to be the teachers and to bring these practices into the home. Education in protected areas has to make better links with the consequences of life style.
- When reviewing the school curriculum in Jordan to integrate water issues, it was discovered that the approach was based on building knowledge and had nothing that stimulated Action. The Royal Society for Nature Conservation influenced an approach that encourages thinking and action.
- At first the approach to developing school resources was for the NGO to prepare the materials itself. It was learnt that it is better to develop the resources with teachers – the users of the materials, to build ownership as well as to develop more user-friendly products. Kits are expensive products and a waste of money if at first questions are not asked as to who will use it? How will they use it?
- In Morocco the government is stressing formal education and not considering informal education. On the other hand conservation projects are weak in involving people in conservation and education;

Monitoring and maintaining control

Each culture has ways to solve its control and policing of protected areas. In Kuwait, local people, *Al-Hajanah* – camel carers - are appointed by the Ministry of Interior to look after the desert and regulate access to areas. These sectors need training in how to deal with the public.

Links need to be strengthened with indigenous knowledge systems and practices in the region, like the *hema* system, which is designed to limit access to certain areas to maintain grazing fodder.

The Workshop

Structure and objectives

Dr Talal Al-Azimi, representing the hosts of the meeting, Kuwait, and CEC member, opened the workshop on the evening of Friday September 13 pointing to the objectives to share lessons and analyse what works in communication, education and public awareness in relation to protected areas.

Dr Sarawi, EPA, Kuwait welcomed the participants and the IUCN Director General, Mr Achim Steiner and Programme Director, Dr Bill Jackson gave introductory remarks in the introductory session on the second day.

Wendy Goldstein IUCN outlined the CEC strategy to build towards good workshops at the Congress in Durban in various regions and to prepare contributions to the Parks Congress products like a handbook and policy advice. The lessons learned would be published in print and on the web site as a contribution to the CEPA² work programme under the Convention on Biological Diversity.

Six case studies were presented selected from amongst the Commission networks. The case studies included experiences from Iran, Saudi Arabia, Kuwait, Bahrain, Jordan, Morocco and Lebanon.

A period of discussion and analysis was facilitated after each two cases. This discussion highlighted lessons, issues and recommendations. It was agreed to try to add further cases to the publication from the region. Only one extra was acquired, from Pakistan and this has been added to this document.



The Director General, Achim Steiner (centre) and to the right, Dr Sarawi and Dr Talal Al- Azimi about to welcome the group.

² CEPA = Communication Education and Public Awareness and is a term used in the Convention on Biological Diversity Article 13 and Wetlands Convention work programmes.

Workshop introduction

In introductory remarks by Dr Talal Al-Azimi, Environment Public Authority (EPA) the importance of communication and education was emphasised including informal education to build professionals for the environment.

The forthcoming World Parks Congress a once in 10 year event is an opportunity for professionals to meet to try to give a new impetus on Protected Areas. Traditionally the focus in protected area discussions is on management inside the protected area, rather than on how to have protected areas supported by society from politicians to the young. Despite the increase in protected areas since the last Congress, to now 10 % of the terrestrial surface, they do not cover all ecosystems adequately – especially dry lands – and many are not managed well. This is not just a matter of rangers and infrastructure but also that society does not understand why protected areas are important. Even in the USA with a long history of protected areas, the association is with leisure. The value of protecting ecosystems is poorly understood and the challenge is how to communicate protected areas so that people will allow them to exist in the future. In many parts of world there is pressure on those reserves that exist from mining, hunting, grazing, resource extraction, declining availability of water. As societies make choices it is essential that ministers, fishermen, herders, local authorities and mining companies become partners in this endeavour.

At the Parks Congress we must help to shape the leadership to tackle these fundamental issues and to make the best of the IUCN Union with its protected areas, science and education and communication expertise.

IRAN - Local Community Empowerment for Mangrove Conservation

Majid Makhdoum³

In 1984 the first protected area management plan was produced by a team of experts and was very scientific. It was not a success. The government did not understand it. Nor did other stakeholders know about it.

After this and other learning experiences, in 1992, with university colleagues and students Dr Makhdoum formed an NGO – the Green Front. This was the first NGO that was allowed to be established in Iran. From past experience of working with Protected Areas and conservation issues, Professor Makhdoum found people did not listen to him and did not care what he said. The same was true for government officials. However in the new role as an NGO they had a different relationship with the people.

The Mangrove Forest on the Iranian and Pakistan border was a Protected Area on paper. Two species of mangrove tree make up the forest and one of the species has medicinal value. The communities used the leaves for fodder and cut the trees for wood. The forest was being reduced in extent and the people did not care about ideas of protection. The situation for people living there was worse than living in a sauna and the people are very poor.

In order to reach the people better, members of the Green Front went to try to live and be like the local people. They shared their food and bit by bit the local people started to talk to them. Trust in Iran means an open heart and when you are trusted, people talk about their problems and ask questions. This took some 14 months of going and coming. As trust developed efforts were made to try to convince the people about mangrove conservation.

They asked many questions – in fact too many questions! Like what is the benefit? How important is the forest? What about our living? The message Green Front suggested was to compare the use of the mangroves to looking at using up their capital rather than living off the interest. The older people could see the change that had taken place in the forests and reflected on the future. Photos were used to show people the extent of the loss of the mangrove forest. The process took an enormously long time. They talked for months about the benefits of the two species. The health benefits of the species made an effective point. However the local people were not interested in benefits to Tehran or Iranians in general.

³ Professor Makhdoum has worked for thirty years in conservation and established the Department of Environment in his university in Iran where he has worked on Protected Areas for the last 20 years. He set up the NGO Green Front.

After 14 months the NGO had raised awareness about the forest to the point that the local people started to protect it from other communities. The people asked that they protect the area, not the government. The communities are now engaged in replanting the mangroves.

It became apparent that the co-operation of the government was required so that the community could be responsible for the mangrove forest. The rural people in the region share two things: poverty and governments that do not care enough for the people. Most decision-makers in the region have no environmental education. So the NGO has had to work hard to make them understand what conservation is and the difference to protection. The same is true often for managers of protected areas, as they are often political appointees.

Green Front decided that they had to work on decision-makers and help them with decision support systems. They decided to teach them – managers, deputy ministers, and the head of state. In this approach, a training manual was not used, but rather material developed to help them understand the use of protecting soil. It was useful to link their messages to the ever-occurring natural disasters and floods.

Lessons

- Local community people and decision makers are both important but there are different ways of dealing with them.
- To make effective communication with Ministers and decision makers it is necessary to prepare a short, solid and pointed message. This takes time to prepare and condense and needs to go beyond scientific arguments and long papers. You need to make your 1- 3 points in a short synopsis of about two paragraphs of the main points. In this form a decision maker has time to read and understand, though a Deputy Minister can receive more information like a two page executive summary.
- The message has to help make the decision easier by giving figures. This lesson was learned when a governor of a province said he did not understand all the talk about conservation and asked to be given a figure that could help him decide what should be protected. A decision making model was developed and a table presented that made it easy for the decision to be made. This figure got results.
- Besides a powerful and practical message that a decision maker can use to make a decision, there is the question of how you get access to be heard. In Iran in principle the government is afraid of university people and NGOs. This can create an opening but you need to be careful in your approach.
- The reputation of the people and the organisations is important. Practice how to present and get the point over so that the opportunity is not lost. .
- The media is also an important means of drawing attention of decision makers to an issue. In Syria the prohibition of hunting came about because the President got the message about the massacre of migrating birds in Syria from reports in the international media. In Iran too, the media is very important to raise the issue with the public.
- The university also holds a workshop on issues and then follows up with direct contact with the decision makers.

- One consideration is to target people before they are ministers to bring them on board with conservation issues before they come to power. LEAD uses this approach by grooming future leaders. There are 3 programmes by LEAD in the region.
- People do not listen to the government staff or government as there is little trust so it is better it use NGOs to reach the community.
- Relations between government and NGO can provide good means to bring about influence using the relative merits of each. In Lebanon good co-operation between NGO and government was used in creating an awareness strategy for protected areas. In Syria, there are good experiences with semi-NGO organisations like youth, women and student organisations to which environmentalists at universities are bringing the message. These organisations then act as pressure on the government.

SAUDI ARABIA - Local community participation in the conservation and protection of the successful reintroduction of the Arabian oryx in the Uruq Bani Ma'arid Protected Area

Yousef Alwetaid⁴

The National Conservation Strategy of Saudi Arabia included the objective to re-establish rare animals. Dr Alwetaid reported on the communication associated with the reintroduction of one rare animal, the *Oryx* into Saudi Arabia. The steps included undertaking captive breeding to build up a population of the animals and establishing a protected area over land with suitable habitat into which the animals could be released into the wild.

Communication issues

As the Protected Area was to be declared in an area traditionally used by the Bedouin community, surveys and preliminary discussion amongst high profile persons was initiated. Contact groups were set up with a selection of wise people or the heads of tribes in the area. These groups provided an important means of feedback and a means to involve them in the protected area management. It was explained that the land was still to be theirs and that the Bedouin were able to use the land, though the use would be controlled. IN the communication, the messages argued that controlled grazing would improve the area for the Bedouin and their herds as well as for the *Oryx*. The tourist potential and opportunities for jobs were also cited as benefits.

The means used to disseminate the message also included a publication and a poster which explained how the area would be improved. The protected area would have a core area. There was discussion about the boundaries for the core area and how to manage grazing in it and around it. As the contact groups advised against fences, drums marked the core area. Outside this core area there was to be controlled hunting. Rangers made patrols to enforce the rules.

To acclimatise the *Oryx* to the new surroundings they were first kept in an enclosure. A ceremony and festival to mark their release into the wild was held attracting the sultan and minister of defence, and many high officials. In fact 2,500 people were invited and housed in camps in the protected area. As well, VIPs from neighbouring countries were invited.

The results of the project are that the core area is observed even without fencing. Livestock in the core area decreased and remains at an acceptable level. The Bedouin

⁴ General Director Training Centre, Saudi Arabia. Notes taken from the presentation.

report on the *Oryx* movements, births and deaths. The members of the contact groups help to heighten awareness of the need for sustainable use of resources.

Lessons learned

Prior consultation with the traditional users of the land helped to build support for the initiative and avoid mistakes like fencing the core area.

Regular consultation with the contact groups gave feedback on the issues and led to their engagement in monitoring the status of the reintroduced *oryx*.

However it was problematic to sort out who were the key stakeholders on the contact groups and a solution in one area did not apply in another area.

Constant interaction was essential with sheikhs, herders and government officials.

High level engagement of Saudi authorities is used to resolve conflicts and their involvement was crucial to build support and understanding in the society.

Some local people receive benefits from employment as rangers.

As well the benefits of the protected area can be demonstrated by monitoring the improved condition of the range land.

KUWAIT - Protecting Desert Ecosystems of Kuwait, the Case of Sulaybia Field Station

Dr Samira Omar⁵

When the Sulaybia Field Station was first set up in 1975 the idea of protected areas was unknown in Kuwait. The station now encloses an area of about 40 square kilometres. Protection of the area was required to arrest the loss of desert vegetation and incursion of sand dunes and to create an area for research and education. The area was further damaged during the Iraq – Kuwait war. The station still faces issues such as how to control bird hunting, poaching, camping, fence destruction and vandalism.



The Sulaybia Field Station has been fenced to reduce grazing pressure, and permits are issued for research studies.

Communication to establish the Station

To establish the site communication began with decision-makers. Grazing in the areas was difficult to control as those who used the land claimed their right to access. In an appeal to the highest levels of government for support, evidence was used from an FAO study that monitored the grazing impact within and outside enclosures.

Eventually the Amir of Kuwait accepted the idea for the Reserve which was originally 20 square kilometres. The assistance of the Minister of the Interior was permitted to provide a team to protect the site and fences were erected.

Communication to visitors and users

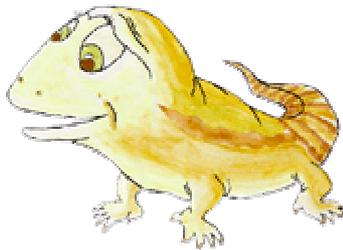
A second area of communication deals with herders, bird hunters and campers who flock into the desert in spring and autumn. As well patrols are important to protect the centre and the site from vandalism.

⁵ National Committee, Kuwait Research Scientist, Arid Land Agriculture Department
Kuwait Institute for Scientific Research (KISR)

To manage the site requires communication with a diverse range of stakeholders. For the public this is mainly by the mass media to address problems and issues of concern. A series of videos on Kuwait TV about the revival of the desert documents the existing wildlife in Kuwait and asks can nature heal itself.

Communicating with campers is by the Al Hajanah – the camel and desert managers.

NGOs are an important group to inform and with which to build support. Seminars and exhibitions are provided and NGOs are allowed to make films in the area and articles are provided for their magazines. Another important group is the wildlife protection committee. School groups and higher education receive lectures and on job training opportunities. For children short illustrated stories are offered like *Darby*, the lizard searching for home.



Darby the lizard is used to appeal to the children and relate to common needs like searching for a home



Illustrations and animal characters are used to tell stories to children

Communication to Decision-makers is by use of formal channels. The Director General can talk to the Minister at any time. The Minister is a member of the Council of Ministers. These messages are carefully prepared. An important aspect has been to invite decision-makers to the site so that they can see and experience what happens there.

Illustrations and maps were used to explain the need to expand the protected area to the municipality. When approval is sought from official groups this is also conveyed to the media so that the public knows what is happening as well as the decision. Kuwait is now processing its protected areas law.

For educational use and research, guidelines have been prepared and permits for access and research are issued. Articles are contributed to KISR magazine *Science and Technology*.

Besides educational programmes for schools, the police and soldiers are trained to support the enforcement of the protection and site workers on how to work there. Information is presented to community meetings and even to the international community.

Results

Since the site was protected 25 years ago, site visits have increased and the use of the area for ecotourism is being developed and tested.

There is much to be done including training for students of Al Hajanah, the police, to increasing access to funding, and clearance from ordinance. The field station has served as a model for the region and many other organisations are starting the same ideas.

One issue is collecting seeds for restoration and students are being used to assist. Another issue is getting oil companies to be involved in conservation and restoration.

Lessons and discussion from the Saudi and Kuwait cases

- Problems arise often as a result of poor communication.
- Different groups need different ways of communicating with them based on their interests. Creating stories and using illustrations can capture children's interest.
- Communication or education messages need to offer information about alternatives for action if community behaviour has to be changed particularly when it affects the livelihoods of the people. For example to stop people watering camels in a protected area an alternative source had to be provided.
- Economic incentives need to be planned and communicated to reinforce conservation messages and to inform people how they will be compensated for losses in economic benefits. In Saudi Arabia some incentives were planned for the communities affected by reintroduction of the oryx. These included employment opportunities (ranger positions in other areas in order to reduce conflict of interest, or positions in the head office). Other incentives like vehicles for members of the contact groups to be able to go and talk to members they represented were not in fact needed.
- One challenge for protected area communication is how to encourage people to wait for benefits to be realised by the protected area. In Saudi Arabia managing competition for grazing sites eventually increased the benefits to the local herders. This in turn resulted in the people controlling the size of their herds, but these benefits were not immediately obvious to the local people.
- Interviews with people first, or setting up a local contact group, are most useful to reveal the main concerns, such as having no fencing associated with a protected area.
- Communicators need to use effective and credible channels to deliver messages. Messages from heads of state are influential. Both established formal channels as well as informal channels are used for communication. The existence or not of intermediaries such as grazing unions or hunting unions was discussed to assist in communicating with "non organised" stakeholders. In Saudi Arabia the Ministry of Agriculture is starting a "grazing council" to make links with herders.
- Representation in stakeholder groups has to be carefully considered. The head of a tribe may agree but members of his tribe may not. In Oman one tribe was ignored. Good assessment and listening to work out the dynamics of the situation is important at the start. Some groups easily select representatives, where as others have no trust of others at all. It can also depend on the issue whether all of the group or only part of a group may be adequate representation.
- Socio-economic studies are used to help identify the main stakeholders and the impact of costs and benefits of the protected areas.
- Inviting high level people and using social events to launch initiatives raises the profile of them in society, attracts the media and builds awareness. Complicated

issues in the region are resolved by referring them to people higher in the hierarchy to resolve.

- Each culture has ways to solve its control and policing of protected areas. In Kuwait, local people, *Al-Hajanah* – camel carers - are appointed by the Ministry of Interior to look after the desert and regulate access to areas. These sectors need training in how to deal with the public.
- Protected Areas near borders need to communicate initiatives to neighbouring countries so that local efforts are not undermined.
- "Park" suggests the notion of Hyde Park or an area for recreation. This includes the idea of hunting for local residents. In Kuwait bird hunting is legal all year round.
- The indigenous *Hema* system has largely disappeared, but has value for biodiversity conservation. *Hema* is a system of regulating access to the commons, to limit grazing pressure on the vegetation. Such practices could be restored to reduce over grazing.

BAHRAIN - Ecotourism and protected areas

Dr Mohamed Abdallah Saeed⁶

Three natural reserves exist in Bahrain. The first movement towards establishing protected areas in Bahrain was started in the mid seventies.

1. Alareen Wildlife Sanctuary

Alareen Wildlife Sanctuary was established in 1976, and is located in an open desert area to the south west of the main Bahrain island. Breeding programs for Arabian Oryx, Sand Gazelle and Houbara Bustard are among the main activities. An educational centre was opened at Alareen in the early nineties and was provided with various educational materials. The Centre was established to target mainly school children and to provide them with information about the wildlife and conservation program at Alareen and Bahrain in general.

2. Ras Sanad mangrove at Tubli Bay

The largest mangrove area in Bahrain is located in the sheltered bay of Tubli. It was declared a Protected Area in 1988. This site is an important coastal wetland in Bahrain and was listed as Ramsar site in 1997 when Bahrain ratified the Ramsar Wetlands Convention.

3. Hawar Islands

The archipelago of Hawar is located to the south east of the main island of Bahrain and consists of more than 30 small islands. The islands and its surrounding waters were declared officially as a Protected Area in 1997. The site is considered by Birdlife International as an important bird area and it is also on the Ramsar List as an important wetland.

Problems and Challenges

Although steps towards the establishment of Protected Areas in Bahrain are appreciated there are still some challenges. While there are three protected areas in Bahrain only one, Alareen, has a management plan and an authority managing it. In contrast Hawar Islands Protected Area has so many authorities involved that it is not clear what people can do at his site. The Sanad Protected Area includes mangroves and being close to the capital suffers from waste being dumped in the area. Despite the last two being Ramsar sites there is no management plan.

The other challenge is awareness. However one of the advantages of a small country like Bahrain is the relative ease of being able to reach people.

Potential in Bahrain for Ecotourism

Bahrain is known for its small size, which does not exceed 710 Km², however, it has a good diversity of habitats and species on land and in the sea. Due to the presence of

⁶ **Mohamed Dr Saeed** Abdallah is an environmental expert from Bahrain

the established Protected Areas and other natural habitats as well as the easy access to the sites and well developed tourism facilities, Bahrain can be considered to be a good place for ecotourism activities. Ecotourism programmes may play a major role in awareness and educational programmes for schools and other sectors including special tourist groups. Ecotourism and its promotion have been used to highlight the value of the protected areas and to create more interest and consideration for their management.

Developing Ecotour Program in Bahrain

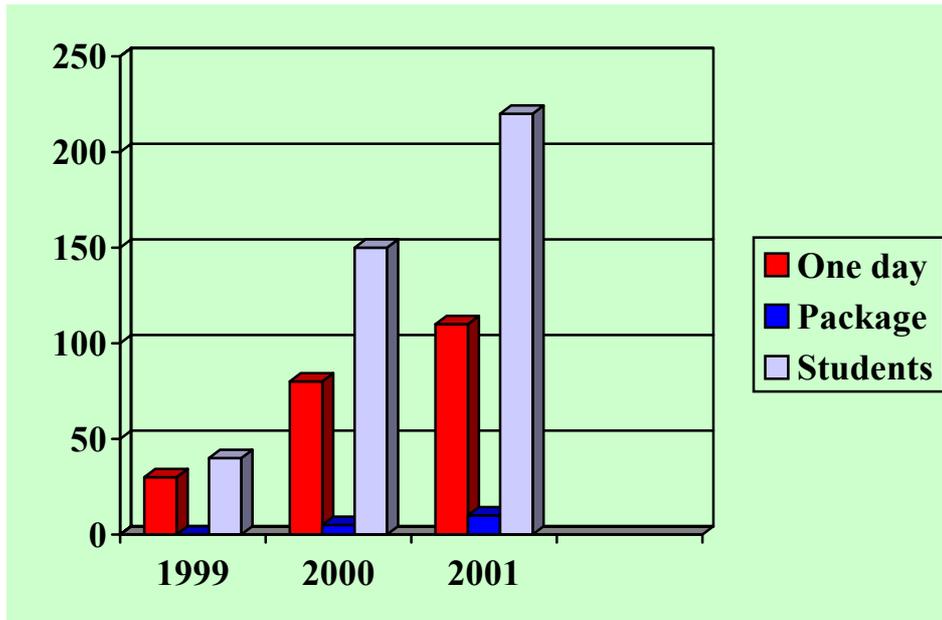
The ecotourism program was initiated in 1998 in close agreement between a private consultancy agency in the lead and with agreement with the Directorate of Tourism, Environmental Awareness Agency and the Wildlife Commission.

The program had the following steps:

- 1998 initiating the program
Creating awareness:– Leaflets were produced
 - Interviews
 - Newspaper articles and other media approached
 - Selecting the tour sites
 - Preparing packages
- 1999 marketing and promotion
 - Communication with the directorate of tourism
 - Organized pilot tours for hotel representatives & airline offices
 - Communication with school teachers
 - Produced a TV program and utilized the internet site
- 2000 ecotour packages and trips officially started
 - Educational materials were produced for students
- 2001 More schools are involved

School trips have boomed, people really love the visits and the students make field reports.





The number of people who participated in the different range of trips, one day, package and students

To start raising awareness and market the areas a pilot tour was undertaken with decision makers to show them the potential of the sites. Papers and TV were involved and the idea of ecotourism as "clean tourism" rather than one that increased "night life" was a good selling point.

School children from a few schools were introduced to protected areas issues and to visit a natural habitat. The children sent letters to newspapers expressing their concern for the site and waste dumping.

To advertise the site, brochures were made about bird watching in Bahrain as well as booklets to stimulate people to talk about the wildlife and the areas. The Directorate of Tourism produced for the first time a brochure on ecotourism. People are coming from all over the world, though package tourism has shown only a slow increase. It is hard to attract people for usual length of time of a holiday package in such a small country and to compete on the global market.

NGOs are participating now. There are 350 different societies in Bahrain, a flowering of organisations since it became an open society. Twenty societies have formed a national environmental committee to co-ordinate their activities and have started campaigns for protection of potential new sites.

To build support for one site – a 40 million year old wadi with fresh water lakes - family camping trips are organised to show the importance of the valley. The aim is to stop further development in the valley and to make it a geological protected area. Awareness raising activities include children's painting competitions and then making an exhibition of the work in the city. One idea is to develop a calendar of the paintings funded by a company.

Challenges facing ecotourism activities

- More Awareness

- More educational materials including a budget
- More cooperation with schools
- Skilled people required for tour guides
- More cooperation with hotels and airliners
- Better communication with officials
- A National Tourism Strategy developed with hotels and airline companies and including ecotourism as part of the strategy

JORDAN - Making it Pay – Dana Nature Reserve

Dr Khalid Irani⁷

Decision-makers tended to think that protected areas are for animals and therefore it is hard to gain their support for them against other priorities. Demonstrating the economic value of protected areas is a priority in countries with developing economies. Ecotourism can be a tool to raise the profile of protected areas as well as generate income for people affected by the creation of the area and its management. In these respects Dana Reserve is now a model for other Protected Areas in Jordan.

Dana is managed by an NGO. The Royal Society for the Conservation of Nature RSCN has authority to manage government land and manages six sites. The Royal Society has also a training and an awareness component in its work and operates over 1000 nature clubs in schools and uses them to support protected areas.

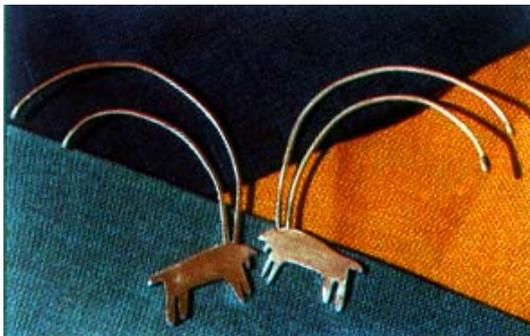
Dana is unique in that it includes ecosystems that vary with the altitude from 1600m to 200m below sea level. It is a site for bird migration and has over 750 plant species. The Reserve is bordered by villages with some of the poorest people in Jordan eking out a living from agriculture and herding. The Reserve had severe grazing impact but because of the poverty it was difficult to stop grazing.

The management of Dana started with a plant and animal survey and a socio-economic survey. The management plan is a working document that is reviewed each year and integrates communication and tourism.

In the beginning the local people resisted all efforts for the protected area despite attempts to show that it would result in tangible benefits. An outreach program was developed and a dedicated officer appointed for community liaison and education.

Zones for tourism were defined along with the carrying capacity for the area. In the reserve it was decided to have shuttle buses bring people to the campsites and numbers are limited. This limitation on the number of people being able to have access was used as a promotional issue, making the area more exclusive.

The policy was to give and train local people for the jobs for the protected area and in 2001 visitors numbered 40,000. The Reserve now pays for its own running costs.

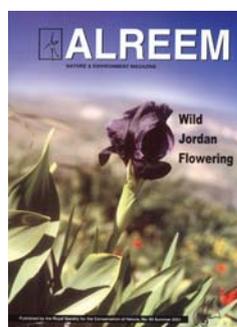
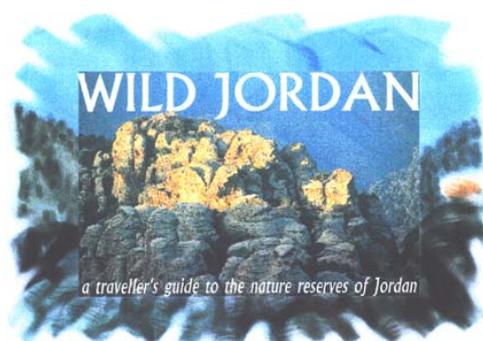


Local people make and sell silver jewellery to park visitors. Now the distinctive silver jewellery depicting wildlife is linked with the identity of the park.

⁷ Secretary General, Royal Society for the Conservation of Nature (RSCN), Amman, Jordan



As there were no markets for the local farms, a shop was created at Dana. Now the local farms provide organic products and sun dried fruits packaged for the tourists and as these have a higher value than fresh food are generating income. Sponsorships were raised to acquire the food drying facility which is managed by the local people.



Several means have been used to promote the area and build its unique profile and to attract tourists. Al Reem is a special magazine issue on protected areas. Campaigns – like “cry for nature” were directed to decision makers.

Children in schools around the protected areas are a focus for activity. A co-ordinator for all education officers in the parks helps to network them. A toolkit was developed for teachers and teachers' capacity built. Now a specific toolkit is needed for each protected area that has a more interactive approach. Over 3500 students are benefiting from the education programs.



As the government policy is to install computers in schools and use of the Internet, RSCN has developed games for the internet based on bird migration. In addition to supporting environment clubs as a non-formal component of schooling efforts are now being made to influence the curriculum. Starting with water the Society staff has learnt how to work with the curriculum and hope to apply this to infuse protected areas into the curriculum.



The process of building support plus the evidence of the economic value of the protected area has paid dividends. Water is a scarce resource in Jordan. Despite that, when the government wanted to build a dam in another protected area, it was possible to finally raise enough public support to convince the government that the dam built outside the reserve made more economic sense. This the value of the work the Society has put into good planning, good funding and a strategy to develop self-sufficiency.

MOROCCO - Reserve de Sidi Bougha –Partnership NGO Government for managing protected areas

Dr Brahim Haddane⁸

This summarises the main points from the full article in French following, which includes more information on the species and protected areas of Morocco.

Introduction

Morocco, with its geographic position on the North West of Africa, is the sole African country to have two maritime coasts; one on the Mediterranean Sea (500km) and the other the Atlantic Ocean (3000km). As well it has two sides bordering the Saharan arid and semi – arid regions. The extraordinary variety of biodiversity of Morocco makes it the second Mediterranean country after Turkey in endemic species with almost 2580 species of plants of which 525 are found only in Morocco and 442 species of animals of which 28 are endemic.

To protect this national richness which is threatened with extinction due to the negative impact of development and over exploitation of natural resources, there is a master plan to protect areas to assure biodiversity conservation, sustainable use of natural resources, ecotourism and education and communication.

Included in this plan is a network of national parks containing 154 sites with great biological and ecological interest with 8 national parks, 19 biological reserves and 127 natural reserves with a total area of 3 187 000 ha and representing 39 of the country's ecosystems. Not all sites have been declared as yet.

Morocco has 82 wetlands covering around 200 000 ha including lakes, river floodplains, and dams. Wetlands are very important for water filtration, storage, and replenishing the underground water table. As well wetlands are very important resting sites and feeding grounds for aquatic birds and migratory birds that cross Morocco. The international importance of these wetland sites has led to Morocco declaring four of them under the Ramsar – Wetland Convention in 1980 – one of which is the Biological Reserve Sidi Bou Ghaba.

Since the World Parks Congress in Caracas 1992 and the United Nations Conference on Environment and Development in Rio, Morocco has begun a process of partnership with civil society and the private sector to realize the protection of threatened species and the sustainable management of natural resources. Along with this in situ conservation, there is promotion of ecotourism and the development of an education programme for visitors and the local population.

The progressive development of the protected areas network has meant that a plan of management is required and that specifies the transfer of certain activities to the partner.

⁸ Coordinator, IUCN National Committee, Temara, Morocco

Such a partnership has been developed and signed with a national NGO SPANA (Société Protectrice des Animaux et de la Nature). The success of this experience has encouraged other similar efforts with other local NGOs in the National Park Toubkal at Marrakech and the National Park of Sous-Massa at Agadir.

The role of protected areas in conservation and communication has been demonstrated to the satisfaction of the Administration which did not have the means to do this alone. As well It has shown the involvement of civil society represented by NGOs who in turn have shown their capacity to act on the ground.

Case study: Partnership between NGO – Administration

In a partnership agreement between the NGO - SPANA (Société Protectrice des Animaux et de la Nature) and the Minister for Water and Forests, the National Centre for Environmental Education (CNEE) has been created in the interior of the natural reserve of Sidi Bou Ghaba. The Reserve is situated 35 km to the north of Rabat and 13 km to the south of Kénitra, close to Mehdiya. The education and visitors centre was built in 1992 and was equipped by SPANA with financial support from the European Union, SPANA UK and Birdlife International.

The NGO is responsible for managing the education centre, which is open 11 months a year. The NGO raises funds to develop and run the program at the centre which because of the government contract has facilitated the NGO to raise funds from international donors. There is an agreement with the Ministry of Education to permit the children to be taken to the Reserve and the Centre's staff collaborates with the teachers to develop programmes with them.

The principle objectives of the National Centre for Environmental Education are:

- To use the Reserve Sidi Bou Ghaba to interest the pupils, students and teachers in the protection of nature in general and the Sidi Bou Ghaba in particular.
- To develop a programme of environmental education for schools and study groups

Programme modules have been developed for presentation to visitors on pollution, the forest, the climate, water, the soil, the adaptation of trees, adaptation, biodiversity and animal and plant reproduction.

The number of visitors has been growing with annually around:

- 6000 pupils, students and teachers have benefited from an educational programme;
- 6000 visitors have benefited from a guided visit of the interactive exhibit;
- More than 60000 people visit the Reserve annually of which about 50% use the walks.

As a result of this encouraging partnership the Minister of Water and Forests has given management of all the Reserve of Sidi Bou Ghaba in a third agreement with SPANA since May 2002.

The Minister envisages launching a partnership with NGOs to develop ecotourism in the protected areas and to create a National Festival for Protected Areas.

Les Aires Protégées: Conservation, Education ou Ecotourisme - Quelle perspective au Royaume du Maroc ? La Réserve Biologique de Sidi Boughaba

Dr Brahim Haddane

Introduction

Par sa situation géographique stratégique au nord-ouest de l'Afrique, le Maroc est le seul pays africain à s'ouvrir sur deux façades maritimes : La mer Méditerranéenne (500km) et l'océan l'Atlantique(3000km), ainsi que deux façades sahariennes arides et semi-arides sans oublier la variété extraordinaire des écosystèmes existantes qui rend le Maroc le deuxième pays méditerranéen après la Turquie en ce qui concerne l'endémisme de sa biodiversité ; celle-ci comprend presque 2580 espèces de plantes dont 525 se trouvent au Maroc, et 442 espèces animales dont 28 sont endémiques au Maroc.

La richesse de sa Biodiversité lui donne la particularité de posséder quelques espèces de plantes rares telles que: Les arbres d'arganiers et l'Acacias albida, mais aussi plusieurs espèces animales rares comme : Le Guépard, la Panthère, le Phoque moine, la Gazelle dama mhor, l'Ibis chauve, le courli à bec grele et la grenouille de l'anti-Atlas.

Afin de protéger cette richesse nationale qui est menacée d'extinction par l'impact négatif du développement socio-économique et la surexploitation des ressources naturelles vivantes, les zones protégées ont bénéficié d'un plan directeur qui vise à assurer la sauvegarde de la biodiversité et des écosystèmes dont elle fait partie ainsi qu'à l'utilisation rationnelle et durable des ressources naturelles, du développement de l'écotourisme et de la communication et l'éducation du public.

Il faut souligner que ce plan directeur a déterminé un réseau national des zones protégées contenant 154 sites de grand intérêt biologique et écologique. Il englobe en particulier 8 parcs nationaux, 19 réserves biologiques et 127 réserves naturelles couvrant une superficie totale de 3 187 000 ha et représentant des échantillons des 39 écosystèmes au pays.

Dans le cadre de la mise en œuvre de ce plan directeur des aires protégées, le Ministère Charge des Eaux et Forêts a préparé des projets fiables et réalisé plusieurs études à l'échelle nationale pour leur gestion financés par la Banque Mondiale et qui couvrent trois parcs nationaux (Toubkal, El Houceima et le Grand Atlas Oriental), ainsi que dix zones d'importance biologique et écologique conformément aux recommandations sur les aires protégées établies par l'Union mondiale pour la Conservation de la Nature.

Les études et les recherches effectuées à travers tout le Maroc ont permis d'établir une liste détaillée des animaux et des végétaux rares ou menacés de disparition dans le pays et qui englobe 181 espèces animales et 1600 espèces végétales.

Les Animaux

Les Mammifères : 102 espèces

Dès l'aube du vingtième siècle et avec l'arrivée des colons occidentaux en Afrique du Nord, les mammifères ont connu la disparition de six espèces : Lion de l'Atlas, le serval, la Gazelle dama mhor, l'Oryx algazelle, l'Antilope Addax et le Bubale, et sous l'effet des conditions naturelles sévères et des activités anthropiques, d'autres espèces se trouvent actuellement sur le point d'extermination comme le Guépard, la Panthère, le Phoque moine, la Tortue marine et le cerf de l'Atlas.

Pour réintroduire ces animaux dans leur milieu d'origine, le Ministère Chargé des Eaux et Forêts a réalisé un programme de réhabilitation des animaux disparus provenant de différents parcs zoologiques qui ont réussi leur élevage en captivité dans des conditions favorables permettant leur développement et leur multiplication, c'est le cas du :

- Cerf de Berberie dans la réserve du Moyen Atlas et le Parc National de Tazekka près de Taza.
- Gazelle Dama mhor dans plusieurs réserves naturelles et dans le parc national de Sous Massa.
- Oryx Algazelle et l'Antilope Addax dans le parc national de Sous Massa au Sud d'Agadir.

Ainsi que la réintroduction de la Gazelle dorcas, Gazelle de cuvier et du Mouflon à manchettes dans plusieurs réserves et parcs nationaux à travers le royaume.

Cette opération a été soldée par un grand succès puisque le nombre des animaux a dépassé considérablement les prévisions du Ministère qui est actuellement en train d'envisager de refaire cette expérience dans d'autres zones protégées.

Les Oiseaux : 236 espèces

Le Maroc possède 82 zones humides qui couvrent une surface d'environ 200 000 ha dont 44 continentales et 38 côtières qui représentent des lacs naturels intérieurs et côtiers, des embouchures de rivières, ainsi que des barrages. Ces zones jouent un rôle biologique et écologique très important, citons par exemple la filtration de l'eau et son stockage, le renouvellement de la nappe phréatique, la protection contre les vents forts et les inondations, la fixation des dunes côtières et la lutte contre l'érosion en plus de la production de l'électricité, ces zones sont aussi considérées comme des aires de repos et de nourriture pour les oiseaux aquatiques et les oiseaux migrateurs à travers le Maroc comme : la sarcelle marbrée, la foulque, le hibou des marais, la cigogne blanche, l'oie cendrée ou la grue grise.

L'importance Internationale de ces Zones a incité le Maroc à déclarer quatre d'entre elles dans la convention de «Ramsar» en 1980 et qui sont : la réserve biologique de sidi Bou Ghaba, Marja Zerga à Moulay Bousalhame, Khnefiss près de Tarfaya au Sud et le lac Afennourir au Moyen Atlas.

Il est indispensable de rappeler que le Maroc possède la plus grande colonie d'Ibis Chauve menacée de disparition sur le plan international située dans le Parc National de Sous Massa qui a connu aussi la réintroduction de l'autruche à cou rouge depuis 1996.

Dans le cadre de l'exécution du plan directeur des aires protégées et surtout en ce qui concerne la préservation des zones humides, un plan de gestion et d'aménagement de El Marja Zerga sous la direction du secrétariat de Ramsar a été préparé et soumis au financement. La réalisation d'un projet de protection des écosystèmes des zones humides et côtières méditerranéennes a été présenté par le Ministère Chargé des Eaux et Forêts et d'autres ministères. Il concerne cinq zones humides sur les côtes de la mer méditerranéenne. C'est dans ce cadre que Med-Wet Coast a ouvert un bureau au Maroc avec Birdlife International.

Les Reptiles : 93 Espèces

Tout comme les mammifères et les oiseaux, les zones marocaines constituent un écosystème riche de différents espèces de reptiles tels que : Caméléon, Varan, Fouette Queue, Agame, Tortue Grecque, Cobra et Vipère à cornes dont un grand nombre est menacé d'extinction à cause de la superstition traditionnelle et la commercialisation. Ces espèces sont considérées parmi les animaux protégés mondialement. Le crocodile a été le plus grand reptile ayant disparu du Maroc.

Les Batraciens : 11 Espèces d'amphibiens parmi elles la très rare petite grenouille d'Anti Atlas.

Les Poissons de Rivières : 19 Espèces qui vivent dans les rivières et les lacs du pays y compris les étangs salés (Sabkha) du Sahara.

Les Parcs Nationaux et Les Réserves

En vue de la conservation de ces espèces plusieurs aires protégées ont été établies à travers le pays conformément aux règlements et guidelines de l'UICN.

Les Parcs Nationaux créés

Il s'agit du :

- Parc National de Toubkal (36000 ha) créé en 1940 dans le haut Atlas.
- Parc National de Tazakka (680 ha) fondé en 1952 dans le Moyen Atlas oriental, sujet d'un projet d'élargissement jusqu'à 13000 ha.
- Parc National de Sous Massa créé en 1991 au sud-ouest des côtes atlantiques sur 34000 ha.

Les Parcs Nationaux en cours de création

- Le parc national terrestre et maritime d'El Houceima (47000 ha).
- Le parc national de Talasamtane (60000 ha).
- Le parc national d'Ifrane (53000 ha).
- Le parc national du Haut Atlas Oriental (49000 ha).
- Le parc national du bas Drâa (286000 ha).
- D'autres en cours d'études :
- Le Parc National de Dakhla (1million ha) .
- Le Parc National du Plateau intérieur (53000 ha).

Les réserves naturelles

Le pays dispose d'un réseau de réserves créées telles que :

- Sidi Chiker ou Msabih Atalaa (Gazelle Dorcas, 2000 ha).

- Takharkhourte (le Mouflon à Manchettes 8000 ha).
- Oua massine (Gazelle cuvier 1000 ha)
- Jbilette (Gazelle Dorcas 400 ha)
- Bouassila (Gazelle Dorcas 300 ha)
- Les Iles d'Essaouira (les oiseaux migrateurs en particulier : le Faucon d'Eleonore)
- Zones humides RAMSAR : Sidi Boughaba (650 ha), El Marja Zerga (73000 ha), Khenifisse (6500 ha) et le lac Afennourir (250 ha) .

Ces sites sont considérées comme des réserves permanentes où la chasse est strictement interdite; les animaux qui s'y trouvent sont protégés dans le cadre des Conventions Internationales signées et ratifiées par le Maroc qui visent la protection des ressources naturelles vivantes en particulier de la surexploitation pouvant entraîner leur disparition totale ou partielle, citons par exemple :

- La Convention de Washington (CITES) concernant le commerce des espèces menacées 1973.
- La Convention de Bonn (CMS) sur la protection des espèces migratrices 1980.
- La Convention de Rio sur la protection de la biodiversité et son utilisation durable 1992.

Depuis une dizaine d'année et après le 3^e Congrès Mondial sur les Aires protégées (Caracas 1992) et le Sommet de Rio, le Maroc s'est engagé dans un processus de partenariat avec la Société civile et le secteur privé pour mettre en valeur la vision tracée pour la protection des espèces menacées et la gestion durable des ressources naturelles.

Cette politique vise la conservation in situ avec la promotion de l'écotourisme dans les aires protégées et le développement d'un programme éducatif pour la communication au profit des visiteurs et de la population locale.

Le développement progressif du réseau des aires protégées a nécessité la conception d'un plan de gestion et d'aménagement de ces sites par les différents intervenants avec le transfert de certaines activités dans le cadre d'un partenariat.

C'est ainsi qu'une expérience de partenariat a été élaborée et signée avec une ONG nationale SPANA (Société Protectrice des Animaux et de la Nature).

La succès de cette expérience a encouragé les décideurs de la multiplier avec d'autres ONG locales. C'est le cas par le Parc National Toubkal à Marrakech et le Parc National de Sous-Massa à Agadir.

Le rôle des Aires Protégées dans la promotion de la conservation et de la communication a été démontré grâce à la satisfaction de l'Administration qui n'a plus les moyens de le faire toute seule et à l'implication de la société civile représentée par les ONG qui ont montré leur capacité d'intervention sur le terrain.

Cas d'étude particulier : Partenariat ONG – Administration

Dans le cadre d'une convention de partenariat entre l'ONG SPANA et le Ministère Chargé des Eaux et Forêts, le Centre National d'Education Environnementale (CNEE) a été créé à l'intérieur de la réserve naturelle de Sidi Bou Ghaba, située à 35 km au nord de Rabat et 13 km au sud de Kénitra, à proximité de la station balnéaire de Mehdiya. Ce centre a été construit en 1992 et équipé par la société Protectrice des Animaux et de la Nature (SPANNA) avec la participation financière de l'Union Européenne, de SPANA de Grande Bretagne, et de Birdlife International.

Depuis 1997, la SPANA assure sa gestion et son fonctionnement suite à une 2^{ème} convention avec le Ministère Chargé des Eaux et Forêts.

Les principaux objectifs du CNEE sont :

- Utiliser la réserve de Sidi Bou Ghaba pour sensibiliser les élèves, les étudiants et les enseignants à l'intérêt de la protection de la nature en général et le site de Sidi Bou Ghaba en particulier.
- Développer un programme d'éducation environnementale au profit des écoles et des groupes scolaires.

Des modules programmes ont été élaborés pour être exposés aux visiteurs notamment : la pollution, la forêt, le climat, l'eau, la migration, le sol, l'arbre, l'adaptation, la biodiversité, la reproduction chez les animaux et les plantes.

Les Statistiques des visites sont en croissance permanente, c'est ainsi que le centre accueille en moyenne :

- 6000 élèves, étudiants et enseignants qui bénéficient d'un programme éducatif.
- 6000 visiteurs qui bénéficient de la visite guidée de l'exposition interactive permanente.
- Plus de 60000 personnes visitent annuellement la réserve dont environ 50 % fréquentent les circuits pédestres.

Grâce au résultat encourageant de ce partenariat, le Ministère Chargé des Eaux et Forêts a cédé la gestion totale de la réserve de Sidi Bou Ghaba, dans le cadre d'une 3^{ème} convention avec la SPANA et ceci depuis Mai 2002.

Le Ministère Chargé des Eaux Forêts envisage le lancement d'un partenariat avec les ONG pour le développement de l'écotourisme dans les aires protégées et la création du Festival National des Aires Protégé

Lessons from the discussion on the cases

- Protected area management is largely about people management – not technical issues – and depends therefore on effective communication and education.
- Planning the communication behind the desk is a waste of effort, first listen to people's perceptions and ideas for a solution, e.g. use a focus group and then develop the communication with their input.
- Arguments for Protected Areas can be linked to the increase in migratory bird populations which has a positive impact on the interest of the area for ecotourism.
- The issue of whether to focus on school children or adults was aired. While some felt that schools provide an institutional mechanism to easily reach a formative target group, others thought "conservation begins at home" and parents need to be reached and responsibility lay with them rather than teachers. "Parents" are not so easily targeted except as a notion of "general public". Others pointed to the fact that children can be effective protagonists for the environment and that experiences when young build an appreciation. One prince said "I'll tell my brother that when he is King to make Bahrain beautiful". In Bahrain children had written to the newspaper following visits to protected areas to complain of rubbish dumping nearby.
- Protected Area benefits can include employment for the local people. In Dana NR Jordan, the staff managers are locals. At the outset the local people were not fully involved in developing the management plan, as they were originally hostile to the protection as they lost grazing rights and were poor. It was not till they could see benefits to them that they became increasingly involved. Now plans are discussed with the local people. Managing the participation was difficult due to a low level of trust amongst the people. A village Council collapsed and over 100 people wanted to be involved.
- Education programmes need to be conscious of developing an impact on lifestyle and action at home. It is felt that visitors make little connection to their behaviour at an educational centre and with what they do at home.
- When reviewing the school curriculum in Jordan to integrate water issues, it was discovered that the approach was based on building knowledge and had nothing that stimulated ACTION. The influence by the Royal Society for Nature Conservation now encourages thinking and action.
- In Morocco the government is stressing formal education and not considering informal education. As a result there are no funds for informal education. Conservation projects are being funded but neither education, nor involving people in conservation. This is a main problem in northern Africa. Are these efforts coming out of overall plans? Are we reaching all sectors of society?
- At first the approach to developing school resources was for the NGO to prepare the materials itself. It was learnt that it is better to develop the resources with teachers – the users of the materials, to build ownership as well as to develop more user-friendly products. Kits are expensive products and a waste of money if at first questions are not asked - Who will use it? How will they use it?
- Action begins with ourselves.
- In Jordan the Dana Nature Reserve made the notion of limited access to the Reserve a marketing and promotional feature. At first this created criticism. VIPs at first refused to take the shuttle bus to the visiting areas until Queen Noor on her visit, set an example. Now the limited access has values in suggesting a place of

quiet and has strengthened the promotion of the area as a place for company retreats – an income generating activity.

- A conceptual issue for WESCANA is clarity on the difference between conservation and protection.
- To have adequate resources allocated to education and communication, this work needs to be developed and integrated as a part of a national strategy, or protected area management plan.
- You cannot assume that what worked well in one place will work well in another. A lot of homework is needed to understand the dynamics of the situation. Stakeholder groups and how to set them up does not follow a formula. In Saudi Arabia, one contact group to represent the local people was quite small, yet in another area, that model did not work well, as people did not trust the representatives.
- Conflicts can be resolved by using the traditional respect for hierarchy in the cultures of the region.
- To really communicate with people you have to talk in their words and from the people's experience. Building the relationships with a community takes time. Academics and scientists can find it difficult to step out of their perceptions and desire to give scientific information.

General Comments

- Ecotourism needs to carefully consider the impacts on biodiversity, though keeping in mind the obvious benefits to creating employment in a region with high poverty. The limits to tourism have to be defined as the bottom line is conservation and the impact at different time scales on biodiversity in protected areas needs to be monitored. The impact of trampling can be great.
- The region could benefit by co-operation to develop ecotourism packages that would include visits to a number of countries and thereby assist smaller countries to attract visitors and compete with other world-wide destinations.
- The availability of desert seeds is a limitation on dryland ecosystem restoration. It was suggested that countries with larger resources could consider seed production turning agricultural production systems to "biodiversity production systems".
- Bottlenecks in Protected Area management include:
 - Funding and donor awareness on the importance of dryland ecosystems;
 - Build on lessons learned from past mistakes;
 - Government awareness and legislation;
 - Seeds of plants;
 - Project development and management.
- Link to indigenous knowledge systems in the region, like the *hema* system, which is designed to limit access to certain areas to maintain grazing fodder.

LEBANON –Bridges for Conservation – Experience of an awareness campaign around four Protected Areas in Lebanon

Andrea Schwethelm –Munla⁹

This paper reviews the experience of an 'awareness campaign', conducted from October 2000 - November 2001 for a Protected Area Project, which used a bottom-up approach to awareness by encouraging grass-root participation in the awareness building process. The lessons learned, being rooted within the Lebanese context, cannot be generalized. But for some financially-strapped protected areas with insufficient resources for education and awareness, such an approach can provide access to a pool of additional resources, easy access to different audiences and new partnerships for conservation.

When Lebanon established its first two nature reserves ten years ago, few Lebanese took note of this important event, and reserves existed more or less on paper until the launching of the Protected Areas Project (PAP) in the Ministry of Environment (MoE) in 1996. The Project, funded through a US \$ 2.5 million grant from the Global Environment Facility (GEF), and implemented with the administrative support of the United Nations Development Programme (UNDP), benefited three nature reserves, Horsh Ehden Nature Reserve, Al Shouf Cedar Nature Reserve and Palm Island Nature Reserve.

Three local non-governmental organizations (NGOs) which had played a prominent role in pressing for the establishment of these protected areas (referred to hereafter as PA NGOs) were given the responsibility of managing the daily affairs of the reserves in collaboration with a locally hired, full- time management team. With the help of the technical and scientific expertise of IUCN - the World Conservation Union the PA Project achieved impressive results such as capacity building of the PA NGOs, training of Reserve staff, development of management plans, inventories of flora and fauna, and the development of awareness material.

While growing professionalism in management produced its first successes inside the Lebanese nature reserves, the surrounding population remained largely sidelined, uninvolved and often uninformed. The remarkable exception was the Al Shouf Cedar Reserve where the Al Shouf Cedar Society (the NGO in charge of managing the Reserve), backed by strong political support, had successfully established close working relationships with municipalities located around the reserve, and had invested much effort to spread awareness and to provide local benefits through a rural development project.

With the help of several NGOs, educational material had been produced on the reserves, including video films, a slide series, training booklets and posters. But clearly more was required to muster public support. In April 2000, the Protected

⁹ At the time of the project Ms Munla worked at the Environment Information Centre CTR-SPNL, Beirut (Hamra), Lebanon and was the project manager.

Areas Project called for proposals for an awareness campaign around the three reserves and Tyre Beach Nature Reserve (established in 1998).

The campaign objectives, according to the PAP terms of reference was to raise awareness and build capacity for conservation among Lebanese in general, and among the communities located around the reserves in particular. Specified target audiences included the media, schools, universities, landowners, farmers, municipalities, community-based organizations (CBOs), the Protected Area NGOs and the general public. The expected output was listed as lectures, seminars, field trips, outdoor activities, publicity campaigns, a brochure and awareness material.

In August 2000, the Protected Areas Project awarded the remaining budget of US \$ 45,000 earmarked for awareness to the Society for the Protection of Nature in Lebanon (SPNL). The project duration originally planned to be 19 month, was shortened to 13 months (from October 2000-November 2001). The Environment Information Center (EIC), which is the branch of the SPNL specializing in environmental education and awareness, had developed the SPNL project proposal and was to implement the campaign.

The Value of “Awareness Campaigns”

Sustainable development requires the wise use of our natural resources to provide for our present needs without compromising the needs of future generations. This can only be brought about through a substantial change in behaviour.

Generally, the proclaimed goal of “awareness campaigns” is to bring about this change. However, the term “aware” describes a state of being ‘informed’, ‘acquainted’, ‘conscious’ and at best ‘knowing.’ Thus, the term describes a passive condition, not an action. In fact, studies in some countries have shown that while a high level of awareness and knowledge on environmental issues leads to a greater level of concern among people, it does not automatically bring about an actual change in practices.

Dissemination of information and raising of awareness is important, but it is only a beginning. If people have neither the practical skills, nor the opportunities for action - awareness becomes almost meaningless. If people don’t acquire ownership over the framework in which to act, in all likelihood action will stop once the outside catalyst disappears especially if other incentives, penalties or rewards, are absent.

Nevertheless, traditional, top-down ‘awareness campaigns’ conceived far from the social, economic and cultural reality of a ‘target audience’ (*note the war-like terminology*) and typically delivered through the media, lectures and the distribution of awareness material, have been the commonly preferred option in Lebanon, as well as in many other countries. Not surprisingly so, since they provide the quick feeling that action has been taken without the agony of devising structural changes or going through the time consuming process of working in partnership with the community.

The Importance of Community Participation

It is true that encouraging community empowerment is tedious and results are far from guaranteed; but enabling even small grass-root actions can exert a powerful effect on the attitudes, abilities and understanding of those who participate. In the end, this step by step process will bring us closer to real and sustained behaviour change than the most perfectly implemented awareness campaign.

Community participation in awareness efforts does not involve the public in management decisions. Its value lies in the fact that it promotes open communication, and builds mutual support and trust between the community and park management and consequently leads to a better understanding of the issues on both sides. Working side by side for a common goal creates a spirit of partnership and a sense of community identity and ownership. Thus, it could be considered a stepping towards full participatory management.

The Thrust of the Campaign

The campaign strategy to focus on local participation was born out of the above considerations, coupled with simple necessity. The allocated project staff, consisting of the full-time project manager and a part-time administrative assistant alone could under no conditions effectively generate awareness among the multiple ‘target audiences’ located all over the country. The small project budget was hardly sufficient to implement the multitude of activities expected on the national level and in the areas around the four reserves. The only option was to identify a new pool of human resources capable of reaching the local audiences.

Thus, the idea developed to establish Local Awareness Committees (LACs) for each Reserve, composed of volunteers representing community organizations, municipalities and key stakeholders. The plan was to train and assist them, in close collaboration with the protected area (PA) NGOs and Reserve Management, to conduct a locally organized awareness event. The hope was to turn these LACs into a permanent support structure for protected area management. Beyond the duration of the campaign, each organization could then spread awareness internally among its membership and join forces with other committee organizations to hold a major yearly community event.



Workshop for a Local Awareness Committee for Horsh Ehdan Nature Reserve

By distributing tasks and responsibilities among many actors, the under-funded campaign could achieve more and reach a larger audience. The roles and responsibilities are shown in table 1.

Working with local committees

After training workshops were conducted for the Local Awareness Committees LACs on the importance of biodiversity and protected areas, each committee proceeded to decide what joint awareness event it would like to organize for its area and to plan the implementation of the event.

The fact that the role of the Environment Information Centre, EIC changed at this point from organizer and trainer to facilitator proved to be problematic because some committee members expected the EIC to be in charge of organizing, implementing and financing these events. The often encountered attitude was that a good local awareness event is costly and beyond the capacity of the committee members. A lot of effort was required to explain that organizing the local event constituted a training opportunity for the committee. Learning to draw from their own local resources would build their capacity to organize similar events in the future without the assistance of an outside agency.

This led to the withdrawal of some disappointed LAC members and to the replacement of a large event with a much smaller one, more in scale with the capacity of the committee. However, in the end, the output produced was still considerable.

Table 1: Roles and responsibilities of key actors

Local Awareness Committee	Participation in training workshops, field trips, activities and meetings	Planning and implementation of Local Awareness Event	Carry out awareness activities within their organizations
PA NGO	Participate in the strategic planning of events and activities	Networking and linking with local actors; coordinate activities of the LAC	Provide technical assistance, administrative support and facilities
Reserve Mgt. team	Act as local focal point and provide logistical support during events	Act as trainers in workshops;	Give presentations to community audiences
Environmental Information Centre EIC	General organization and supervision of all activities; follow-up, monitoring and reporting	Organize national events and events for the media; Organize and conduct workshops and field trips	Production of awareness and training material;

The Local Community Events

The local committee LAC of the **Al Shouf Cedar Reserve**, in collaboration with the management team, organized two successful Open Door Days for their Reserve. They invited local inhabitants to visit the Reserve and secured free transportation from the municipalities. LAC members acted as guides for the over 400 people who took advantage of this occasion. Now, the Reserve management plans to repeat this event on a yearly basis.



Field trip for school children in Al Shrouf Cedar Reserve



Al Shrouf Cedar Reserve

The LAC and the management team of the **Horsh Ehdén Nature Reserve** organized a three day festival. Like in the Shouf, they prepared a series of trips for the local population, training young scouts as guides for the visiting groups and procuring free bus transportation from the municipality. Activities included night hikes to the Reserve with star gazing, an exhibit organized with the local women's organization, a workshop on organic food and agriculture, video projections and a concert in the packed main village square and a tour of the Reserve for the Media. Again the decision was taken to make this a yearly event.



Sensibilization games during a field trip in Horsh Ehdén Nature Reserve

The local committee LAC of **Palm Island Nature Reserve** had initially planned a large scale Turtle Festival which had to be cancelled due to a decrease in size of the committee and other organizational difficulties. Instead, committee members organized a two day awareness event which included Muppet Theatre performances for children, an exhibit, and a video presentation. The main event was a seminar

organized in cooperation with the syndicate of the fishermen who are key stakeholders in the Reserve. The seminar was well attended and could well be the beginning of a fruitful dialogue between the fishermen and the management of the Reserve.



Workshop for and in cooperation with fishermen and the Fishermen's Syndicate

In Tyre, working with the LAC was especially difficult because the Reserve still had no financial resources and no management team. However, the enthusiastic participation of the cultural club of a local football team in the committee led to unusual results. After inviting the football team to a short presentation and tour of the **Tyre Beach Reserve**, a brochure was prepared with pictures of the team, their comments, and some information about the protected area. After a press conference, the media was invited to visit the protected area and to accompany the players to the public beach section of the Reserve where they distributed the brochures.



The football team visits the Tyre Beach Nature Reserve

Workshop for the Private Sector, Municipalities and the Media

Ecotourism provides an opportunity for cooperation between different stakeholders and has potential to contribute to the sustainability of the Nature Reserves. An international expert on eco-tourism was hired to take part in a workshop discussion about how each sector can contribute to ecotourism with representatives of the Ministry of Tourism, the Ministry of Environment, municipalities, the media, protected area management, hotels and, for the first time, representatives of

ecotourism companies as well as mainstream tour operators. Discussions and workgroups focused on of how partnerships can be developed and how the local community can benefit from ecotourism.



Preparation of a village luncheon as part of the local ecotourism services offered by the population



Spreading the message through mimes during a protected areas festival in Beirut

Achievements

The campaign featured over 80 activities which cannot all be mentioned here in detail (see table 2). Despite many shortfalls mainly due to too many activities within a short time and a lack of funding, the experience was seen as an overall success by those who participated. Most LAC members felt they had personally benefited and at least one LAC remained active after the termination of the project.

Additional awareness material was produced, new audiences were reached and local capacity for spreading awareness was built. The new partnerships that were developed open new opportunities for future cooperation and the lessons learned from this campaign can be used to improve future campaigns.



Minister receives the new brochure on the Nature Reserves above and below hands on activities in environmental education

Opening of an exhibit on the nature reserve; bottom model of Palm Island Nature Reserve prepared by students showing the infrastructure that they visualised for visitors



Table 2: Activities Conducted from October 2000-November 15, 2001 under “The Awareness Campaign Around 4 Protected Areas”

4 Workshops for Local Committees	1 National School Competition	Internet page on the Campaign and Protected Areas
4 Workshops on Environmental Education (EE)	Establishment of 4 Local Committees	Brochure on Protected Areas in Lebanon
4 EE Field trips	4 Field Surveys	Audio-guide on Palm Islands
3 Workshops on Organic Farming	1 Press Conference	Leaflet on Palm Islands Nature Reserve
1 Workshop for Fishermen	3 exhibits on Nature Reserves	Brochure on Tyre Beach
4 Community Events	2 Field Trips for Media	Documentary on the Campaign
2 Workshops for University Students	2 Exchange visits for Local Committee Members	Educational Booklet for Children on Forests and Protected Areas
1 Workshop on Ecotourism	16 School presentations	Poster on Sea Turtles
1 Evaluation Workshop	8 video presentations for community organizations	1 Reference Document on the Campaign
1 Protected Area Festival-Beirut	7 TV and Radio Interviews	TOTAL number of Activities: 82

Problems Faced

The core problems faced during the campaign were lack of funds and lack of time. The Terms of Reference for the Project channelled efforts into too many point activities, which left insufficient time for in-depth preparation, follow-up, or for the development of more sustainable programs and partnerships. No additional staff could be hired due to a lack of funds. Renegotiating the Terms of the Project would have been advisable but seemed hardly possible in light of the expected termination of the PA Project in November 2001.

Project implementation was also slowed down by the late signing of the official contract which was a prerequisite for key partners to join in the activities.

Due to the volunteer character of the PA NGOs and the lack of staff of the management team (or no management team as in Tyre Beach Nature Reserve), the Centre EIC also had to assume much of the role of a local campaign coordinator and had to take over more responsibilities than expected in the planning and implementation.

In some instances, effective local cooperation was hindered because PA NGOs members did not consider collaboration with the local community a priority and local committee members did not take their commitment seriously. The campaign also suffered from the lack of availability of the previously produced awareness material, as it had been produced in very limited quantities. There was also a lack of sufficient reliable data on the biodiversity of the reserves.

Evaluation

A one-day workshop was organized at the end of the awareness campaign with the stakeholders to evaluate the activities (workshops and local community events) and the overall organization of the campaigns. Following each evaluation, the participants developed a set of recommendations.



Local Committees come together to exchange and evaluate the campaign

In addition the work of the Local Committees and the educational field trips were separately evaluated.

Overall, the partners felt that **the campaign was a totally new and innovative experiment** which had good results, especially because it aimed to involve the community directly. They welcomed the **establishment of new partnerships** and the exchange of experience and they were pleased with the participation of various types of community organizations. They pointed out that the implementation of such a large number of activities within a very short time was achieved only by exerting a lot of effort and that, despite the constraints, many of the activities were very effective.

To improve next time:

- Negotiate the terms of reference for the project so that efforts are not channelled into point activities instead of sustainable program development.
- Prepare a long-term strategy for awareness about protected areas and allocate a portion of the financial support for protected area management by the Ministry of Environment to awareness.
- Set more realistic objectives to enable depth and adequate training to occur and define clearly the role of partners.

- Make sure there is enough time to develop the work-plan and to prepare and plan activities in coordination with the partners. Clarify the respective roles and input and support to be provided by partners especially NGOs that are staffed by volunteers. More involvement of the protected area NGO and the management team was necessary and could possibly have been achieved by creating the position of an awareness specialist for each area.
- Communication needs to be planned, both internally in the project e.g. to provide a clear communication protocol for focal points with an organisation and externally to maximise the involvement of the media and other organisations.
- Provide more information for a better understanding of the local situation.
- Create a network between all protected areas to exchange information and improve work tools for awareness.
- Diversify the project team to include experts with various fields of expertise to give justice to the wide variety of topics.
- Provide additional detailed information at the introductory workshop on Developing Partnerships for Awareness around Protected Areas for the Local Committees and attract more organizations from different sectors.
- Provide more time to help volunteers learn hands on activities when training.
- The Workshop for Farmers / Fishermen would have provided more benefits if it included more practical experience than theoretical lectures. Information on the role of the protected area as it relates to the fishermen is needed.
- The Workshop on Partnerships for Sustainable Tourism needs to be followed up and expanded.
- Make more efforts to gain the support of public figures to give greater visibility and impact to the campaign.
- There was generally the feeling, that more material and information on the reserves should be available for dissemination.
- Many participants felt they would benefit from a complete file on the workshops for easy replication.

Lessons Learned

In general:

- The intervention of an outside party (EIC) and the support of national and international partners (Ministry of Environment, IUCN, GEF, UNDP) can act as a catalyst for initiating local awareness efforts.

Establishment of Local Awareness Committees:

- Provides the protected area management which has insufficient manpower, with a pool of trained human resources to conduct awareness activities.
- Decreases the cost of organizing awareness events
- Greatly facilitates the dissemination of information about the importance of the protected area to new audiences
- Enhances communication, mutual respect and understanding between Protected Area Management and a large cross section the community.
- Promotes a feeling of community identity with the Protected Area.

Community members are more interested to participate in awareness efforts if:

- Protected Area management has shown serious concern for the needs of the local community and is engaged in a continuous dialogue with local stakeholders.
- If they are considered and treated as full partners by the protected area management.
- If the awareness efforts of community members is supported by the protected area management team.
- If sufficient training and awareness material has been provided

Future Campaigns

To address the general lack of awareness on the need to conserve biodiversity, future projects in Lebanon need to address basic weaknesses in the existing system for delivering awareness programmes. In particular it is necessary to strengthen the communication and education components of protected areas management by establishing long-term educational programs and by setting up informative Nature Centers around the Reserves. Each Reserve should have a full-time awareness specialist, guides well-trained in interpretation techniques, and a comprehensive set of educational material on the area. Cooperation with research institutions needs to be strengthened to make scientific data available and accessible for a broad audience. Local Awareness Committees should become a permanent entity and linked through formal channels to the protected area management

Conclusion

Local Awareness Committees are by no means the only avenue towards raising awareness for nature reserves. But they are a good option, because they foster civic responsibility and provide rare opportunities for adult citizens to learn and apply more sustainable practices and processes, such as consensus building and development of partnerships.

More such opportunities are needed and can be created through structural changes and a flexible framework which allocates time and resources that allow for the uncertainties of a people-driven process. The establishment of long-term educational programs addressing the community and educational institutions and the production of informative material should be an integral part of this approach.

How this is done in practice, will in the end depend on the area and country context. But the experience of this awareness campaign in Lebanon has provided another case in point that if protected area management invests and gives value to the development of partnership and communication and education strategies they will in the end reap the benefits of increased community support for conservation.

Recommendations from the workshop

1. Knowledge management

- Improve the exchange of education and communication information, experience and materials by using the web to upload information with regular e-mail prompts on new initiatives.
- Put the Kuwait workshop cases on the CEC and WESCANA web sites.
- Circulate the e-mail list of all the participants in the workshop, set up an email and use this to regularly share information and prepare for the Parks Congress.

2. Protected Area Education and Communication publication

- Prepare a publication with the cases from the workshop, and including the lessons learned in English. Wendy Goldstein to edit and produce. Deadline for submission of articles October 15.
- Mohammad Sulayem will try to arrange for the publication to be produced in Arabic.
- In addition request extra cases from Tunis and Egypt - Mohammad Sulayem to arrange for these articles. Ali Akbar will arrange for an article from Pakistan. Khulood Tabaishat will be asked for an article from PERSGA experience. The question remains whether to find a case from ROPME.
- The case format is to be circulated and should include lessons learned from mistakes.

3. Biodiversity information sheets

- The 60 biodiversity information sheets prepared by the north African countries in French, English and Arabic are to be put on the CEC and WESCANA web sites. Abdelhamid Belemlih, Morocco will send a CDROM with the sheets to Wendy Goldstein. We will consider producing CDs for broad distribution of the sheets in the region, in the hope that these can be locally adapted and printed for use.

4. Protected Area Training.

- Training Centres in the area would benefit from an exchange on the areas of work that they undertake and a discussion on the functions that each undertakes to reduce overlaps. A workshop is proposed, perhaps facilitated by IUCN.
- The Saudi Centre undertakes environmental education training and is willing to share information on its courses.
- Information on what training resources exist should be collected and that information made available.
- The region could benefit from training in:
 - Project development
 - Project funding and fund raising
 - Project management

5. Congress Training Manual proposal.

- Assist in the definition of the product. Who is the **target group** of the Manual? Who are protected area managers when increasingly collaborative management is becoming part of the Park Management process involving local communities. One suggestion was that Protected Area **Rangers** and **managers** need a manual to assist them to make better contact with the local people and to undertake outreach programmes, and how to engage stakeholders.
 - **Content** should include project development, management and funding. The content should include the lessons learned from mistakes that have been made in protected area management in the region.
 - Consider the definition of products for particular regions and use of what exists already. For example: Materials developed for Lebanon on Protected Area Management Training; Materials from RSNC, Jordan and Saudi Arabian Centre, Pakistan. CEC could recommend how to maximise on these resources.
 - The methods of developing training manuals with the users should also be advocated.
 - There was discussion on a training **manual for use with local communities**. On the one hand we needed to define what local community meant. Then language is an issue, as is the diversity of the local communities in WESCANA. If a manual is for local communities then any more language groups have to be considered, as do the specific contexts of the communities which vary in the region. Cost would become a serious factor if you consider trying to communicate the benefits of biodiversity in other languages.

6. WESCANA at the Parks Congress

- The region is important for future genetic management of crops for arid areas, and particularly in the face of climate change. The importance of protected areas to arrest genetic diversity loss and therefore contribute to alleviate poverty of populations world wide has to be emphasised to donors and decision makers alike. Therefore the value of the region and its examples need to be featured in cases presented at the World Parks Congress.

7. Thematic Centre for Ecotourism

- The Saudis propose that a Centre is set up in WESCANA to share information and act as a Forum to guide ecotourism in the region.

PAKISTAN: Keeping the Promise for Kirthar

This case-study is presented by a mining and exploration company which needed to develop a communication strategy to deal with the objections to its planned exploration in a protected area. Part of the communication strategy was a 20 minute documentary, entitled “Keeping the Promise for Kirthar.” It concerns the debate surrounding a gas exploration project in the Kirthar National Park and its surrounding protected area in Pakistan’s Sindh province.

Background

Kirthar National Park is one of Pakistan’s largest, stretching over 3087 km² in the foothills of the Kirthar Range, south western Sindh, approximately 100 km north of the port city of Karachi. The park is listed as a protected Category II area in the IUCN –The World Conservation Union - categories. Kirthar was established by the Government of Sindh on 31st January 1974, is governed by the regulations laid out in the Sindh Wildlife Protection Ordinance 1972, and is managed by the Sindh Wildlife Department (SWD).

Key features of the Park include its large indigenous population (mostly from the Burfat, Rind and Gabol tribes), rugged land forms, and indigenous flora and fauna, including populations of threatened mammal species such as Sindh Ibex (*Capra aegagrus*), Urial (*Ovis vignei*) and Chinkara (*Gazella bennettii*). The park is bounded by the Mahal Kohistan Wildlife Sanctuary (705 km²) to the south, the Eri Sumbak Game Reserve (406 km²) to the east, and the provincial border with Balochistan to the west.

Although the boundaries of Kirthar National Park were formally established in 1974, legislation and guidelines have been difficult to enforce as evidenced by the increasing human population and industrial activity within the park boundaries. When the park was established, the original human population was estimated at approximately 7,000 (1972) with it increasing another 3,000 during the monsoon season. Over the years, the human population in the park has increased to the point where it is now estimated to be approximately 25,000 with another 5 to 10,000 moving into the area during monsoon season. More recent estimates even suggest figures for the park’s population as high as 70,000. In 1972, 667 km² were leased by the government for cultivation and stock grazing and 359 km² were privately owned. While the present status of these lands is not known, current land use including agriculture, grazing, wood harvesting, and road developments impose increasing ecological stresses that led in some areas of the park to degradation of wildlife habitat.

The project

In 1997, the Ministry of Petroleum and Natural Resources (MOPNR) of Pakistan awarded the exploration license for Dumbar concession to Premier Exploration Pakistan Limited, now known as PKP Exploration Limited. This concession area is of particular interest as it encompasses areas of the Kirthar National Park (KNP), the Mahal Kohistan Wildlife Sanctuary and the Eri-Sumbak Game Reserves – areas that are protected because of their biodiversity value. The Sindh Wildlife Protection

Ordinance (1972), which outlined the legislation protecting the area did not allow mining or similar activities in the area at the time of the award of the concession.

Problems to be addressed

As a result of this, the Kirthar National Park became the subject of controversy between national and international non-governmental organizations (NGOs) and the Exploration Company attempting to gain access to the Park to begin exploration. Despite commitments from the company to use industry best practises and advanced technologies for the protection of the environment and the species within it, NGOs remained adamant that the company's exploration license should be revoked and the opportunity to tap potentially large gas reserves rescinded. This resulted in negative media stories which could result in financial loss and threatened the company's image.

Strategy

Rather than ignore the protests of the NGOs, the company decided to engage with these very organisations in order to demonstrate to them that the company could manage its operations in an environmentally sensitive manner, and would in fact, contribute to the net betterment of the very area the NGOs were seeking to protect.

A communication strategy was developed as a tool to inform and educate people, about the industry, its track record in environmental protection and community development, rather than as an advertising or selling tool. The company decided to maintain an open door policy on its operations for all interested parties. Before developing the strategy a stakeholder analysis was undertaken to substantiate the need for communication with the companies venture partners. PKP assessed the stakeholders on the basis of their influence for the success of the project and their existing level of support to the project¹⁰. Out of a group of 20 stakeholders, three groups were identified:

- Beneficiaries, those who would or would not benefit from the project;
- Decision makers, those who have a direct influence on the project
- Opinion makers, those that had an indirect stake in the project but could nevertheless influence other stakeholders.

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For each group a separate set of communication tools was developed including meetings, pictograms, brochures, tours and public meetings. Important were inter-active opportunities to convey details of the company's activities and its approach to environmental management and community welfare. As part of the environmental impact assessment (EIA) process; the company developed a public consultation and disclosure plan based on the assessment of key stakeholders and their influence on the project.

¹⁰ Khan Omayma, PKP Exploration Pakistan Limited; Khan Basit, PKP Exploration Pakistan Limited, Dennis Paul, Premier Oil plc; (2002); *Communication for Public Consultation*; Society of Petroleum Engineers (SPE), Kuala Lumpur, March, 2002.

Devising a communications strategy is perhaps a novel approach for the oil and gas sector to take, but it's one that contributed to the company's subsequent approval for seismic operations in the Kirthar NP. One that came after four years of sustained effort during which it became evident that the opinion of some of the stakeholders changed significantly as a result of the communication strategy.

Results

PKP began its seismic operations in the latter part of 2001, after approval for the project's Environment Impact Assessment (EIA) was given by the regulatory authorities. Under the Pakistan Environment Protection Act, 1997, all potential industrial projects, must first undertake an EIA to assess the impacts of the project and to formulate mitigation measures that will serve to minimise these impacts. The seismic operation was carried out within the stringent mitigation measures and monitored independently for compliance to the EIA. This is the first time that such an activity has been undertaken in a Pakistan Protected Area. More important, PKP has set high precedents in conforming to laws, regulations and industrial best practices that govern and guide extraction activity within sensitive areas. Hence, stakeholders and the regulatory bodies overseeing the project, i.e. the Sindh Environmental Protection Agency (SEPA) and the Sindh Wildlife Department (SWD), recommended that the extensive measures being employed by the company to protect the environment should be documented and produced for public consumption.

A tool of communication – a documentary

PKP decided to produce a documentary that would inform stakeholders on the issue of how seismic operations are performed and the consequences to the protected area. Since this was an area of controversy and people were concerned about the damage from the underground explosions used. The documentary showed from another site under what controls the seismic operations are performed, and allowed the viewer to see the process of seismic exploration and exactly what the controversial 'explosion' that was thought to be potentially disastrous for the Park was in fact like.

Furthermore, the documentary recorded the opinions of the various stakeholders, including critics and supporters of the project. The documentary *Keeping the Promise for Kirthar* gives the audience an independent view of the controversy and brings together the stakeholders involved in this project, discusses the issues on both sides of this debate and leaves the viewer to decide.

The documentary begins with a background to the controversy and how it began and Pakistan's need for energy. However, it focuses on:

- a) The seismic project.
- b) Legislation with respect to exploration in environmentally sensitive areas.
- c) The concerns of all the stakeholders.
- d) Wildlife related sensitivities in the project area as well as the potential and actual impacts on the area.
- e) Development issues for the local communities that are living in poverty.
- f) Resource use within the area including fuel, water and land.

- g) The environmental parameters within which the company conducts its operations. It outlines the extensive work done by the company to ensure that the projects have minimal adverse impacts, if any, on the area.
- h) How the public has been debated publicly and how the project has been steered by public consultation.

However, getting the project's critics to voice their concerns on a documentary funded by the exploration company was a hard task, but one at which PKP was fortunate enough to succeed. This contributed greatly to making the film balanced and impartial, despite the fact that some critics were not willing to record their comments on film.

To maintain the integrity of the film, what the interviewees thought and felt about the project was recorded frankly in the documentary.

These included the views of the:

- Local communities;
- Media;
- Non-government organizations
- Leading biodiversity and natural resource experts; and
- Relevant government departments, such as SWD and SEPA

As managers of the Park, the Sindh Wildlife Department has immense knowledge about the Park, its habitats, the species housed in the area, as well as, the communities residing there. Hence, the documentary team used the guidance of SWD to ensure that the main issues concerning the Park were covered. The documentary communicated to people how Parks are being looked after by Sindh Wildlife Department, so it created awareness about the Park Managers too and the Park Management Plan process which PKP is working on with the SWD.

WWF-Pakistan's representative, Mr. Ali Habib was impressed by the production, claiming that the production was "reasonably balanced", especially considering that it was funded by the company itself. Furthermore, WWF was also satisfied that WWF's position was recorded candidly and openly.

The SWD and SEPA suggested that more documentaries on PKP's operations in the field should be produced, so that the environmental management plan and its effective implementation can be recorded.

Keeping in mind the sensitive positions of some of those interviewed for the documentary, the film was viewed by the stakeholders individually and any comments noted before the documentary was released for general public consumption. This was much appreciated. Fortunately, there were no comments that required that the documentary to be changed. All stakeholders including the critics were satisfied that their views had been presented fairly.

Local non-government organizations such as the Sindh Rural Support Programme complemented the effort undertaken by the company in making the documentary and stated that this was the first time that the voice of the communities had been recorded.

Speaking of the local woman in the documentary, the NGO representative said that her comments explain the hopes and vision of the people of the area.

The documentary is being aired at various events and forums and feedback is being collated.

Communication has to be backed up by action. The real intervention of the project is not the documentary itself, but the sustained delivery of the promises that the company has made for investment in the area. By seeking independent views and addressing them, the company has shown commitment to its open door policy, and as a result has shown itself to be working towards effective resolution.

The company must remain vigilant in remaining apprised of the sensitivities of the area and to continue to work within the parameters it has set for itself. It is only with continued commitment that real change can be brought about.

As the Exploration Company was funding the film, there was a general suspicion on the objectivity of the final document. However, it is expected that in future this issue will not rise due to the balanced outcome of this film. As mentioned it was difficult to get all the stakeholders to talk on camera.

Subsequent to the success of this documentary, PKP will now be producing two new versions of this documentary - one in Urdu, Pakistan's most popular language and another in Sindhi, the local language of the project area. With these new versions, the documentary will be shown to a wider audience including the local communities.

PKP's partnership with the SWD will continue. In fact, it is now working with Sindh Wildlife Department in the development of a Park Management Plan. Another contribution of the company was to fund a natural resource inventory of the park. Once the Exploration Company leaves the area, its contribution in terms of a management plan for the Park will be a substantial effort for the future of the area.

Workshop Evaluation

<i>What went well</i>	<i>What is to be improved next time</i>
Time to discuss and analyse the cases and draw out lessons	No program for the workshop received in advance, nor for the Forum
Enjoyed it and learnt a lot	Broader invitation as we would have liked to present a case study
Good experience	Received late the format for the presentation
Talks more focused than most workshops	Clarity of expectations from the presentations
Chairing keeping to the focus	Not focused properly – details of ways to do it
Having only a few talks and time to discuss	Provide a skeleton of the output from the workshop to tick off
Well structured	More focus on communication
Good not to be too structured	A day more
Learnt a lot and we started to address lessons from mistakes	Follow up after the meeting important
Excellent workshop and useful discussion	Care to see that the speakers were going to be here
Good chance to learn from each other	
Limited number of speakers	All speakers to be present from the beginning
Sharing experience and good atmosphere, democratic and frank	Process to prepare commentary requires having cases sent around before
Organiser's evaluation	
Kuwait organisers provided a very good facility for the session	Earlier engagement of WCPA regional leadership and involvement of regional Chairs in selecting cases
Speakers presented well on the education and communication aspects of the cases, and good examples of work in the region.	Give the Chair a better briefing to be able to steer the discussion on analysis of the E&C lessons
Larger attendance than expected, though most present had not been contacted in advance. Good friendly atmosphere.	Attach a session to all IUCN Forums, but advertise it very early as part of the programme so that a more inclusive opportunity is made available and overlapping activities can also be avoided. As it happened the meeting was advertised amongst the 2 Commissions only, limiting participation and knowledge of the programme.
Structure allowing for good discussion periods	In setting the context for the workshop it was a little confusing to have the publication, Congress products and Biodiversity work programme to consider. No time to deal with the code.
While programme and format sent well in advance and twice as an attachment it is not necessarily read	The organiser to make a phone briefing in advance to the speakers and chairs

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