

# Synthesis Report **5**

## ALTERNATIVE ECONOMIC MODELS TO SHOOTING OF MIGRATORY BIRDS In Mediterranean Third Countries of North Africa and the Middle East



# Synthesis Report ( V )

## ALTERNATIVE ECONOMIC MODELS TO SHOOTING OF MIGRATORY BIRDS

### In Mediterranean Third Countries of North Africa and the Middle East

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Project partners



## 1. The need for alternative economic models

Although in some countries of the region (e.g. Tunisia, Algeria and Morocco) hunting is well-regulated, there are still problems of illegal hunting activity which threaten migratory species and undermine attempts to create national sustainable hunting programmes. Illegal hunting can be tackled through attempts at stronger enforcement, higher penalties etc. but another approach is to try to find other models for sustainable use of hunted species which provide direct economic benefits. If migrant birds can be shown to have economic values (in addition to cultural and aesthetic values) which can be realized without killing them this can be a powerful argument for their conservation. This is particularly true in situations where local communities can see direct benefits coming to them from non-consumptive use of migrant birds (e.g. through ecotourism), creating strong local support for conservation efforts. This is not an argument against hunting of migrants but an argument for uses (including hunting) which are managed sustainably to ensure the long-term conservation of the species. The approach can also help to change attitudes in favour of sustainable hunting (for example if a particular migrant species has economic value because it attracts tourists as well as being hunted then hunting must be carried out sustainably so that populations do not decline, the species continues to be available for birdwatchers and hunters and both uses can continue to provide economic benefits). Another approach is to augment or relieve hunting pressure on wild populations of game birds through captive breeding – either for release back into the wild (which need to be well managed and strictly controlled in order to avoid genetic pollution or spreading of epidemics) or for sale as food. A method of satisfying the sporting aspect of shooting without killing birds is through the provision of other sport shooting opportunities ( e.g. clay pigeon shooting ) .

## 2. Constraints on development of economic alternatives

For economic arguments to work it is necessary to demonstrate the economic benefits of these alternative approaches. In most countries, the true economic values of hunting are not well documented and better information on this as well as on the economics of the possible alternatives is needed in order to promote both sustainable hunting and economically-viable alternatives to hunting. It is also crucial to ensure that any alternatives promoted are carried out according to best practice and do not themselves result in any negative environmental or conservation impacts. For example, introduction of exotic game birds or inappropriate habitat and species management (killing of predators) can have a detrimental effect on native biodiversity. There are also potential and actual conflicts between competing activities – for example, some of the best bird watching sites are also places favored by tourism hunters but birdwatchers do not want to visit sites where hunters may be active and the birds are disturbed. Hunters in some countries are a strong lobbying and political force and may be influential in resisting any approach which they see as limiting their freedom to hunt. In most countries of the region there is a general lack of capacity and resources for the development of economically-viable alternatives (e.g. lack of organizational capacity or trained and knowledgeable ecotourism guides) and the security situation in some countries is also a constraint (discouraging foreign visitors and investments). Poor management and degradation of habitats and wildlife in areas which were previously attractive for tourists to visit also undermines the development of ecotourism .

## 3. Captive breeding/ reintroduction of game birds and game bird management

Lebanon, Jordan, Tunisia, Algeria and Morocco all have captive breeding programmes or activities, some with associated game or habitat management activities, designed to augment wild populations of hunted game birds. Most of these involve resident species but the release of additional game birds of any species could potentially help to relieve hunting pressure on migrants. Syria has one captive breeding reserve for mammals and a hunting reserve for birds (Widian Al-Rabee) is being established .

In **Lebanon** captive breeding is undertaken by the National Society for Wild Hunting (NSWH), overseen by the Ministry of Environment which requires that no alien species are introduced. The NSWH mandate is to breed and release game birds into the wild in order to replenish bird populations to allow hunting in the wild; financial support comes from Ministries of Agriculture and Environment. The captive-bred species are Chukar Partridge, quails and pheasants. There are also some private hunting reserves which carry out some captive breeding and buy birds for release from the NSWH. One of these, near Aamik marshes and the Al Shouf Cedar Nature Reserve in the Bekaa Valley has a reputation for poor environmental and hunting practices (e.g. use of calling machines to attract wild birds from nearby protected areas and indiscriminate killing of predators including raptors). As a result of concerns over this, the new hunting legislation in Lebanon includes consideration of the need for guidelines and monitoring of the management of private reserves .

In **Jordan** , captive breeding has only been undertaken on a small scale (mainly Chukar Partridge and some Pheasant) and privately, by hunters (including the royal family) wanting to augment local populations for hunting .

In **Tunisia** , three demonstration breeding centres for Barbary Partridge have been established to enhance populations and repopulate areas where the species was becoming rare. The Forestry Division reports that these are providing encouraging results. Earlier attempts to breed and introduce exotic species (e.g. Pheasant) in the 1960s were not successful. A partnership between the Ministry of Agriculture and national and regional hunters' associations is working to enhance game bird management through habitat enhancement as well as monitoring and conservation of game on hunting reserves. Specific methods include signs banning hunting; planting of forest clearings with food crops; provision of water in arid regions; improved reserve supervision and increased numbers of anti-poaching personnel .

In **Algeria** , hunting related programmes are largely funded by government and private hunting areas are lacking. At least 300 people work in hunting centres and reserves, including the following: In Djelfa hunting reserve, there is a major programme involving semi-captive breeding of endemic ungulates and habitat management which may also benefit small game birds (partridges). Mascara hunting reserve has a breeding centre and development programme for game birds; Zeralda hunting reserve is publicly managed and this includes some activities likely to benefit game birds but there is no specific programme of habitat improvement designed to increase game bird densities. Three hunting centres in Alger and Tlemcen are run with the objectives of enriching the national hunting heritage through production of local hunting species and introduction of new species; promotion and development of local hunting; organization of hunting-related research, follow-up and monitoring .

In **MOROCCO** , there has been a strategy in place since the 1980s to safeguard wild stocks of game birds (especially Barbary Partridge and francolins). Four public breeding stations produce up to 6,000 live partridges and francolins annually for repopulating hunting reserves and there is one private breeding station which supplies the needs of hunting tourism and leasing societies (up to 12,000 birds annually). In recent years, the public stations were struggling to function due to slow release of government funds so their management was handed over to the Royal Moroccan Hunting Federation under an agreement with the Department of Waters and Forests; the aim now is to produce 20,000 chicks annually. There is a private breeding station at Bouznika producing exotic species (6,000 to 8,000 pheasants annually) and exotic quail species have also been introduced. The Department of Waters and Forests favours the management of hunting lands by hunters and it achieves this through leasing 390 plots under the hunting leasing law. Under this arrangement the hunters invest in conservation and habitat rehabilitation on the leased sites according to an annual management plan approved by the local forest service. The leasing programme produces 36% of the total National Hunting Fund revenues and results in habitat improvements on hunting lands. The captive breeding programmes in Morocco alleviate some of the pressure on wild game bird populations and create employment in rural areas, thus meeting a government social development policy objective .

## 4. Quail farming for consumption

There is some Quail farming in Lebanon, Jordan, Tunisia, Algeria and particularly Egypt to produce birds for sale as food. In Lebanon, Quail and other birds are regarded as culinary delicacies so there is potential for significant economic returns (surveys reveal that supermarkets would sell farmed Quail from Lebanon and Jordan) but no information exists on the level of demand or current sales . In Egypt, Quail are farmed and sold directly to restaurants and to shops. This provides an economic alternative to shooting wild birds but no figures are available on the value of this and it does not appear to have reduced levels of hunting of wild Quail. Farmed Quail is less popular as a food; it is available all year round and the meat is regarded as less tasty. Similarly, in Tunisia, Quail farming has not reduced the levels of hunting of wild Quail; it simply allows people who did not previously eat the species (because hunted Quail cannot be traded) to buy and eat birds from the shops. People who can obtain wild birds still prefer to shoot and eat these .

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<sup>1</sup> Blackcap and other warblers are the most widely eaten and favored birds in Lebanon but it is unlikely that they could be bred and marketed commercially.

## 5. Bird watching and other ecotourism

In most countries of the region bird watching and nature tourism are only just beginning to become accepted or popular activities and in some countries (e.g. Syria and Egypt) they remain very marginal. The economic potential in all countries, particularly from international tourists, is considerable but most countries have no information on the current economics nor on the potential demand and possible economic returns from expansion and increased marketing of the ecotourism opportunities. Birds in general are a very good ecotourism resource because they are relatively easy to watch and identify compared with other wildlife. Migrants offer particular opportunities – for example, spectacular congregations of large soaring birds (storks, pelicans, raptors etc.) at bottleneck sites, often in remote and beautiful scenery; the opportunity to explain the fascination of migration and international flyways .

**Syria** has virtually no bird watching or ecotourism; studies are being carried out to investigate the potential for ecotourism programmes based on bird watching in Sabkhet El-Jabboul, on Bald Ibis specifically at Palmyra and for the establishment of a bird observatory in the area of Widian Al- Rabee' hunting reserve .

In **Lebanon** , bird watching is being encouraged at pioneering reserves such as Al Shouf Cedar Nature Reserve where bird hides and ponds to attract birds were established in the year 2000; to date this has not attracted much interest among national visitors but other reserves are also starting to provide facilities. However, there is a great need for investment in infrastructure, capacity building, marketing, promotion and awareness-raising. The Society for the Protection of Nature (SPNL) in Lebanon is supporting this through training in bird identification and guiding for ecotourism operators and conservationists under a joint project with the conservation NGO "A Rocha" Lebanon. There are 15 companies offering nature . based tourism and another 10 eco-clubs, associations and NGOs which offer nature-based tourism. The Ministry of Tourism web site only has 4 references to bird watching although the introduction (by SPNL) stresses the potential of the country for bird watching. The Ministries of Environment and Tourism have raised awareness through activities such as the Year of Ecotourism (2002); SPNL organized the World Bird Festival at a key bottleneck site and the 10th anniversary of the AEWA Convention was held at an Important Bird Area (with a high level of national participation and associated Press coverage). SPNL attended the British Bird Fair for the first time in 2005, leading to increased interest in Lebanon from specialized international bird watching operators. Tourism is an increasingly important sector in Lebanon. It produced \$US 1300 million net income in 1998, contributing around 16.4% of the GDP in year 1995. There are no accurate official statistics on nature-based tourism or ecotourism in Lebanon, since it is not yet officially recognized as a separate category, but a World Bank report<sup>1</sup> estimated the minimum annual recreational values of migratory bird watching in the Shouf Cedar Nature Reserve and the whole Ftouh-Kesrouan region to be US\$ 43,500 and US\$428,800 respectively (which can be extrapolated to an annual figure for Lebanon as a whole of US\$ 1,645,700). There are however, reports from European visitors and residents in Lebanon that the high levels of hunting, coupled with the security situation, deter international bird watchers from travelling to the country. This is because they fear disturbance and intimidation themselves and because they find the birds fly higher or are very weary as a result of hunting pressure. The figures for potential economic returns from bird watching can therefore also be interpreted as the "opportunity costs" of bird hunting which prevents the economic benefits of bird tourism being realized ( in addition to any ecological costs from actual loss of hunted birds ) .

In **Jordan** , bird watching tourism is increasing rapidly in popularity. In the past, bird watching was very much limited to foreign visitors and usually organized by British tourism agencies (often with Jordanian bird watchers as guides) which took tours around the country to visit key bird watching sites (mostly well-known protected areas). More recently, the Royal Society for Nature Conservation (RSCN) has demonstrated on reserves that ecotourism in Jordan has huge income-generating potential. RSCN is encouraging and supporting much more involvement of national agencies and tour guides through training programmes on ecotourism and bird watching (40 tour guides and their associations trained).Several tourism agencies have commissioned national bird experts to design and lead bird watching tours. In Azraq province a hunting lodge regarded as the main gathering point for hunters in the 1980s (Azraq Lodge) was converted into bed and breakfast accommodation for recreational users (e.g. bird watchers) following a hunting ban covering Azraq Oasis and the Eastern Desert .

In **Palestine** , ecotourism, bird watching and their economic potential have been promoted by NGOs and government organizations and they are now more popular than they have ever been previously. The Jericho Wildlife Monitoring Station was established by the Ministry of Education (Environmental Quality Authority), the Ministry of Tourism and the Palestine Wildlife Society to support ecotourism and to offer to Palestinians the opportunity to learn more about their own environment and the need for bird conservation .

<sup>1</sup> The Cost of Environmental Degradation. The Case of Lebanon and Tunisia. World Bank June 2004. (Environmental Economics series, paper no. 97).



In **Egypt**, efforts have been made since the 1990s to develop and promote bird watching tourism, through direct contact with international tourism companies, publicity and Press, the internet and presentations (e.g. at the British Bird Watching Fair). Bird guides were trained and capacity developed in at least one Egyptian company specializing in bird tourism. At the peak in the mid 1990s there were an estimated 500 tourists annually (mainly from Europe and the United States) travelling to Egypt specifically for bird tourism, principally through a number of large international bird tour companies and generating more than US\$ 175,000 for the Egyptian economy. Bird tourists stayed in Egypt for an average of ten days to two weeks and most combined bird watching with another activity such as sightseeing (antiquities). Numbers have declined greatly since the 1990s because of terrorism fears but the potential is still estimated at thousands to tens of thousands of tourists who would be interested in seeing birds as part of their Egyptian experience .

In **Tunisia**, ecotourism is seen to have great potential because of the country's biological, geographical and landscape diversity (deserts, forests, wetlands, fauna and flora), proximity to European markets and its political stability. Partly in response to this realization, Tunisia has created a network of protected areas and nature reserves covering the main ecosystems (e.g. the famous Ichkeul National Park which is a UNESCO Biosphere Reserve and a natural World Heritage site). Several European nature and bird watching tour operators (especially from the UK, Switzerland, Germany and Spain) organize bird watching tours to the country. Tunisian regulations do not oblige foreign tour operators to work with qualified local guides so many of these agencies operate with local drivers in possession of a general tourist guide licence and bring their own bird guides. National ecotourism companies offer tours including sites of both cultural and natural heritage interest and sometimes activities such as olive picking, cheese and honey production, visits to almond groves in bloom etc. There are still weaknesses in infrastructure such as lack of 4-wheel drive minibuses, rural accommodation and trained ecotourism guides. AAO's regional branch in El Haouaria on the Cap Bon is organizing and a Spring Migration Observation Camp since some years now, which receives both resident and foreign birdwatchers (from Europe) .

In **Morocco**, ecotourism has developed significantly since the mid-1990s and both landscapes and biological diversity are known to attract tourists; growth in the sector has been supported through training of eco-guides and the involvement of tour operators in development of the industry .

## 6. Clay pigeon shooting or "Tiro"

Clay pigeon shooting for sport is practiced in Lebanon and can be a viable alternative to the shooting of migratory and other wild bird species. The Lebanese Federation for Hunting and Shooting Clubs organizes an annual national competition and clubs accredited to the Federation raise awareness among their members of issues such as wildlife conservation and safety measures. In an opinion poll carried out by SPNL among hunters, the majority responded that the most viable alternative to wild bird hunting was clay pigeon shooting and hunters said that they use the sport to practice and demonstrate their shooting skills and to relieve stress. Responses also indicated that wider development of clay pigeon shooting clubs would help to reduce illegal hunting (ensuring that wild bird hunting is carried out only during official hunting seasons and for permitted hunting species); a similar response was given in Tunisia. Currently, there are several constraints limiting such development (including availability of land, equipment, skilled personnel and the relatively high membership fees). If "tiro" is to be promoted more widely it will also be important to ensure that proper environmental standards are followed (for example, no use of lead cartridges, collection of cartridges, minimum surface area, sufficient distance from residential areas to avoid disturbance etc.). En Algérie le sport de tir est organisé par la Fédération nationale de tir aux armes de chasse représentée sur l'ensemble du territoire du nord algérien .

## 7. "Himas" in Lebanon

Himas are community-managed protected areas (managed for sustainable use of their natural resources) which have existed in the Arabic World for more than 2000 years. SPNL (Society for the Protection of Nature in Lebanon) is currently promoting the revival of this traditional management practice through municipalities (local authorities) and has successfully declared two key bottleneck sites as Himas through municipal council decisions (in the Bekaa valley – Kfarzabad wetlands and in South Lebanon at Ebel es-Saqi). The new hunting legislation in Lebanon allows for private land owners and municipalities to forbid hunting on their lands and this approach is working successfully to reduce hunting pressure in these two sites. These initiatives demonstrate the commitment and power of communities (through municipalities, private owners or local conservation groups) to enforce hunting regulations in a way that may not be possible through other government agencies, police or the military. They are successful because enforcement is driven locally and coupled with awareness-raising and educational activities as well as local income-generation (e.g. ecotourism, with benefits returning to the local group responsible for managing the Hima). They are seen as having potential for restricting hunting on other key sites in Lebanon such as Important Bird Areas (although this is likely to be unpopular with hunters as IBAs are often key traditional hunting sites). There is increased interest and demand from private owners and municipalities to replicate Himas more widely in Lebanon and it will be crucial to demonstrate the ecological and economic values which they offer to communities in order to maintain support for this approach nationally and locally .

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