# Sustainable Technology for Rural Tourism Development

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# Promotion and protection: eco-tourism in the Moroccan Middle Atlas

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"For some time it has been obvious that there are no satisfactory short-cuts to higher standards of life in developing countries through projects (often conceived and executed in a hurry) which are unrelated to a scientific assessment of their ultimate consequences."

G. Mounfort, Portrait of a Desert (1965).

#### Introduction

This paper<sup>1</sup> purports to examine strategies to reconcile development of rural tourism in the Middle-Atlas eco-region with the implementation of urgently needed conservation projects. Recently, off-road activity, combined with eco-tourism-related walking has become increasingly popular and could develop into a growth industry. While the Middle Atlas boasts superlative scenery, and a vast potential for eco-tourism, not to mention associated forms of activity (white-water canoeing, fishing, skiing, bird-watching, back-packing, and pot-holing) these very assets are under multi-directional threat. Would it not therefore be unwise to kill the hen before it can lay that proverbial golden egg?

It has yet to be fully taken on board in Morocco that certain wild, remote areas of the Atlas, with their unique alti-montane environment (as in Bou Iblane and Ayyachi), specific flora and fauna, not to mention shrub-land, woodland and wetland avifauna – much of it endemic – have become a resource in their own right. Unless firm action is taken to implement existing legislation on wildlife protection, irreversible losses will be sustained in the field. Hit by drought, poaching, massive deforestation, soil degradation and overgrazing, some of the most promising eco-tourism locations are rapidly losing their glamour. Upland pastures are giving way to man-made desert, while the shorelines of Agelmam Sidi 'Ali, Agelmam Azgza and other lakes are receding dramatically, and the cedar forests are under threat. A situation compounded by speculation involving stock-breeding, a mini population explosion and runway urbanization resulting in glorified *favellas* that pose grave environmental problems connected with garbage disposal, hygiene, depletion and/or contamination of the aquifer.

Worse still the region itself, with its minimal hotel infrastructure and ageing road network, has, for various socio-political reasons, suffered from neglect over the past fifty years. Now is the time for deeds, not words. Let us accordingly examine some of these problems more closely and suggest remedial action.

# Existing problems and possible remedies

1/ First and foremost, what is needed at this stage is a *sea-change in the mindset* of both rural and urban populations  $\grave{a}$  *propos* of the environment. This can only be achieved through better education all around, thus creating full awareness as to the environment being a beneficial resource. This, of course, begins in primary School. It involves, amongst other considerations, teaching school-

children not to throw garbage out of a car-window, or over the garden-wall; not to swing on tree-branches till they break. This has been fully acknowledged by Abdeljalil Belkamel of Marrakesh, who unequivocally states: "Man belongs to an ecosystem. He has begun to destroy it, thus forgetting that he is destroying himself (...)That's why I organise workshops for school-children to create awareness about botany." As a possible follow-up to this it is refreshing to record that the Association Touristique de Montagne du Moyen-Atlas (AMTM) is planning organisation of education tours to promote environment-friendly interest in the area at the national level.

2/ Gîtes and rest-houses In the worst cases, tourist quarters in Berber villages constitute tiny, dedicated enclaves complete with foam-rubber mattresses, shower baths and other mod cons, the walls adorned with posters showing 'typical' Moroccan scenes.<sup>5</sup> The phoney side of the arrangement is further high-lighted by the organisation of 'Berber evenings', in which specially-groomed locals will perform folk-dances by moon-light, inviting tourists decked out as 'pseudo-Saharans' to join them! Sustainable rural tourism is probably better off without the facile glamour and sensationalism generally offered to run-of-the-mill package tourists.<sup>6</sup> A shrewder bet would be to set up basic, clean, functional, and strategically located guest-houses (such as the kasbah-style *auberge* at lake Tislit, Imilchil). Such establishments should employ properly trained personnel; a good cook, in this connection, being an important asset.

3/ Training *local, environment-friendly guides* to accompany eco-tourists on wildlife photo safaris. If most mammals and reptiles have been decimated, there are birds and butterflies in profusion, requiring a dose of expertise in natural history on the part of local guides. Strangely, probably through lack of information, there appears to be a dearth of qualified guides in the Middle-Atlas. Interestingly, in 1998, the few that do operate in the Imilchil/Errachidia region, were, contemplating setting up their own association, separate from the ANGAM, a move that seems to have resulted in the creation of a body calling itself APAME. For rural tourism to remain user-friendly and durable, efforts have to be made on both sides to lessen potential friction. It is a truism to state that tourists' behaviour has an impact on locals. While the locals sometimes need to improve their standards in certain sectors (accommodation, catering, hygiene, etc.) tourists should avoid voyeuristic camera-clicking heavy-handedness vis-à-vis Berber women, ostentatiously drinking alcohol, wearing ultra-short shorts, stripping to the waist, handing out pens, pencils and sweets to children. Though Moroccan tour leaders will caution foreign adventure trekkers on this and other points, visitors feel entitled to ignore such recommendations merely because they have shelled out a sizeable sum of money. Clearly, problems of this kind require implementation of some sort of behavioural code.

4/ Addressing problems caused by *market economy*. Most noticeable among repercussions on the mountain environment is in the area of stock-breeding with absentee herd-owners instructing shepherds to maintain animals in highland areas on a year-round basis. This has led to permanent occupation, especially around Lake Afenourir, Timhadit, Beqrit and Jbal Tichoukt, with 'sedentarization' of former transhumants, <sup>12</sup> placing adjoining areas of pasture and woodland under permanent threat.

This can be partially offset by a) reducing the number of goats to an environmentally acceptable level; b) cordoning off specific areas for replanting of trees and grass – a measure already in place on Jbal Tichoukt, near the Zad pass, between Dayet Ashlaf and Aïn Leuh, between Ja'far and Mitqane. In this connection, implementing specific remedial action for cedars is a national emergency. The Middle Atlas cedar forest has been suffering from various abuses for far too long. The pay-off came in the spring of 2002 with numerous trees of varying ages suddenly drying up and drying, including the 'Gouraud' cedar and, in particular, some specimens in a comparatively protected environment on the AUI campus, from which Barbary Apes are notably absent.<sup>13</sup>

Allegations that bark-stripping by Barbary macaques is chiefly responsible for this state of things require qualification. This writer's in-the-field experience is that the primate is frequently cited as a convenient scapegoat, both by local populations and the Forestry Commission whenever the topic of cedar degradation is raised. It may, admittedly, be in part responsible. However, drought-induced climate change, treetop- and branch-cutting, slash-and-burn, and felling by the locals are equally, if not more to blame; the monkey should therefore not be made to carry the can. Furthermore, plans to relocate 'surplus population' of macaques – and here we are talking about a 'vulnerable' species – near Chefchouen, in Bni Znassen, Tazerkount, and the Tizi n-Test, in eco-regions largely devoid of cedars, are apparently being envisaged without impact assessment on target areas. If Moroccan macaques have changed eating habits this is due to man-made biodiversity changes in the cedar forest; with further research revealing that bark-stripping is linked to water scarcity. Also, far from increasing, the macaque population has actually declined by "about 40% in the last 20 years".

Two closely-related ecological problems: a) Curtailing speculative orchard development that, in dry years, draws too heavily on water-table, especially around Dayet Aoua. Here again, though, given the business interests at stake, some convincing arguments will be required to achieve any measure of success. b) Also, in Immuzzar-Kandar area, assessment should be made of fall-out from waste matter discharged by units for mass-produced poultry, which can eventually inflict serious environmental damage; as in Brittany.

5/ The need to *set up Nature reserves* has never been much in doubt in Morocco. Despite delays in implementation largely due to funding, the Middle Atlas now features a reasonably successful ensemble: the Tazekka national park with its Barbary sheep, reintroduced Barbary deer and numerous species of birds. Other developments have witnessed the creation of a farm near Missour for breeding the Hubara Bustard, a small zoo near Nzala n-Ayt Izdeg on the Midelt-Errachidia road, while a project to reintroduce the Atlas lion into the Sefrou area has been aired recently. Culling would be allowed once this and other species had been built up to a reasonable level, part of the reserve then developing into a "controlled shooting area", <sup>16</sup> an arrangement that has proved satisfactory in several countries, whatever the misgivings of dyed-in-the-wool environmentalists.

With some of the larger mammals confined to museums or zoos, a considerable proportion of Morocco's fauna (including endemic and rare species) hovers between the 'vulnerable' and 'endangered' status.<sup>17</sup> On the fringe of the Middle-Atlas eco-region, in a unique environment of montane forest with great development potential, lies the Tirghist game reserve belonging to the *Parc National du Haut Atlas oriental (PNHAO)*, with its Barbary Sheep and Cuvier's gazelle. Unfortunately, due to insufficient study of impact assessment on locals, the latter are totally unaware as to the positive fall-out from a properly managed game reserve. Hence the need for appointing qualified park rangers to reinforce action of existing Foresters, emphasizing the pedagogical rather than the punitive side of things.<sup>18</sup>

6/ Upgrading modest, down-hill skiing facilities at Jbal Hebri and Michliffen along with outdated, almost non-existent infra-structure. Since its long-delayed opening, the Aghlias hotel at the Michliffen ski-centre has functioned intermittently, largely because of fickle snow-cover. There are, however, some encouraging signs of imminent action by Ifrane municipal authorities, with talk of the much-awaited national park. Local skiing talent needs encouragement, so that more lads and lasses may step in the foot-steps of Samir Azzimani and Sara Ben Mansour, subsidies awarded to Moroccan Ski Foundation at present proving insufficient to generate significant sporting activity. <sup>19</sup>

In order to introduce recreational diversity, there is a crying need to create parallel activities: mountain-biking, guided walks on foot, and excursions on snow-shoes and/or Nordic skis, both feasible with scant snow-cover. If the existing Middle Atlas ski-areas were better organised they might hold greater appeal for tourists, while the largely untapped ski-mountaineering potential of 'Ayyachi and Bou Iblane remains a vital asset.

7/ Fall-out from 4-WD tourism. With off-road vehicles becoming highly fashionable in Western countries, the Atlas has become a not-so-happy hunting-ground for the off-road brigade. However, repeated visits by motorcades of 4-WD and trail-bike exponents fail to fit in with the environment they cross, at best contributing noise and dust, and incommoding back-packers; at worst involving the locals in accidents. Mountain guides in the Tounfit area, lamenting the decline in numbers of mountaineering and trekking parties, have been forced to switch to off-road activities. Unfortunately 4-WD tourism, though exceedingly non-environment-friendly, is here to stay because; a) it is a high-profile, status-symbol activity with a maximum-publicity angle; b) 'big money' is involved, and it is common knowledge that in this kind of situation commercial logic will prevail. One can only hope that off-road enthusiasts will develop greater environmental awareness and refrain from "indiscriminate driving of vehicles across vulnerable surfaces", 21 as, for example, on the lakes Plateau (Imilchil) and Meskeddal grazing-grounds (Bou Iblane).

8/ From highland castle to high-rise block. Many people of mountain origin have moved to foot-hill towns such as Zeïda, Zawit Esh-Shikh, Khénifra, Ayt Shaq, Tighessalin, Mrirt, Tounfit, Boumia and Midelt,<sup>22</sup> and are now residing in uncomfortable, often insalubrious apartment blocks. A side-effect of this creeping urbanization is appalling waste-disposal problems, unchecked accumulation of plastic and other debris. An obvious solution would be to set up small, economical garbage disposal units. Here one should go for user-friendly, low-tech battery-operated incinerators rather than more expensive, sophisticated equipment with potential maintenance problems. As a rider to that, one could add: use the available Moroccan resources in vegetable fibre to stage a dramatic revival of basket-weaving so that housewives need no longer take their groceries home in plastic bags. Also, make more trash bins available, as at 'Gouraud cedar', between Ougmès and RP 21 road, though not without providing instructions for use on a clearly-visible notice. In a word, problems concerning rubbish tips and all-pervading litter need to be addressed urgently.

9/ To minimize branch-cutting for firewood, make small Kerosene, or Butagaz cooking stoves available to locals at knock-down prices. This would give forests a much-needed respite as they are suffering badly enough as it is. It is not always appreciated that every day much of Ayyachi's relict montane forests comes down to Midelt (just as Burnham wood came to Dunsinane in Shakespeare's *Macbeth*!) in the shape of small convoys of 4-5 faggot-bearing donkeys.<sup>23</sup>

10/ Finally, necessity of improving awareness among Morocco's decision-makers as to exact locations of areas ear-marked for protection under the Protected Areas Management Project, initiated in the early 1990s, together with relevant faunal inventory, nature of required protection measures and full implications of sustainable tourism. Subsequently, instituting national and international multimedia promotional back-up of tourist-related conservation programmes.

#### Conclusion

So far, the Middle-Atlas has been the Cinderella of mountain-related development in Morocco; this apparent neglect, however, should be seen as a blessing in disguise. In terms of mountain tourism, the Middle-Atlas area is fortunate in having been spared the 'honey-pot' effect one usually associates with Toubkal, Mgoun, Sirwa and Saghro, though the Imilchil region is beginning to suffer from this affliction. Whereas the spotlight has been on the big-name destinations, our Cinderella stands to gain from experience (both positive and negative) obtained in those areas the better to get her own act together. In other words, learn from mistakes made in those areas, especially regarding rubbish-disposal, gîte management and custodianship of high-altitude huts (as would ultimately become necessary in both Bou Iblane and 'Ayyachi massifs). Her selection of valuable ecological assets are a trump card she should now play carefully, and, given the present focus on eco-tourism and since its very future hinges on their survival, existing assets should be placed under maximum surveillance and protection.

Locals should continue to receive assistance in land-use-related problems and, as remoter areas are opened up to the outside world, be further made to realise what they stand to gain from preserving the environment rather than destroying it. For this purpose, presence of ALD agents could be recommended because of their useful pedagogical action vis-à-vis the target population.<sup>27</sup> All of which will entail despatching dedicated task-forces into the field to take stock and address the above-mentioned problems; submitting feasibility reports and impact assessments.

Finally once all the admirable recommendations have been made by the various experts, not to mention solemn declarations of intent and undying commitment to the environmental cause, it is imperative that a duly appointed Steering Committee use clout to ensure implementation of measures suggested within a reasonable time-frame.

## **NOTES**

- 1 For reasons of socio-cultural similarity and close proximity, the area between Midelt and Imsilchil has been included here as an extension of the Middle-Atlas. While containing much new material, the present paper naturally draws, to some extent, on some of my previous papers and presentations at Al-Akhawayn University in Ifrane; also at the Institut de Géographie Alpine, Grenoble (cf. bibliography).
- 2 Cf. Housa Yakobi, "Faces & places of the Atlas", *Proceedings of the Amazigh Days conference*, March17-18, 2003, AUI, (in the press).
- 3 A. Belkamel, Médina, Jan-Feb/2002.
- 4 Atlas-Hébdo, n°4-5, p.10; cf. also <a href="http://www.meknes-nt.com/article.php?artid=1562">http://www.meknes-nt.com/article.php?artid=1562</a>.
- 5 L. Pezelet, 1997, p.375.
- 6 It is largely due to massive frequentation by national/international visitors, either individually or by the bus-load, that scenic spots such as the the Oum Rabia' sources and Ouzoud falls have become thinly-disguised tourist-traps. Cf. E. Millet, *Guide des Merveilles*, p.117-118 & 129.
- 7 When I visited the Rural Commune of Tafadjight in the Jbal Bou Iblane area, together with IGA-Grenoble & Cadi Ayyad University (Marrakech) delegates from a conference being held in Sefrou, on September 8, 1998, none of the locals appeared to have heard of the CFAMM (Ayt Bou Gemmaz Mountain Training Centre), nor did they seem to be particularly upbeat about training mountain-guides.
- 8 Association Provinciale des Guides de Montagne d'Errachadia. Cf. Maroc: Tourisme en Montagnes et au Désert, Ministry of Tourism, Rabat, 2000 (?).
- 9 Instance of woman near Boumalne-Dadès holding up rags and plastic to veil her head from the prying eye of Courtney-Clarke's camera; cf. *Imazighen*, p.178.
- 10 This was due to misguided directives, as in A. Le Panot's guide (1990, p.359), urging tourists to take with them provisions of coins and ball-point pens for distribution to Ayt Hadiddou women at the Imilchil *musem*. This early-1990s trend, that proved highly detrimental to the rapport between tourists and locals, has since been reversed, tour leaders now strictly discouraging this practice. However, the damage has been done and will take months/years to eradicate.
- 11 Cf. Notional 'Mountain Charter' initiated by "Kasbah du Toubkal" hotel in Imlil, a highly environment-conscious, upmarket, Anglo-Irish operation set up in late-1990s in Imlil.
- 12 G. Fay, 1986: 153; Bencherifa & Johnson, 1993: 108; S. Boujrouf, 1996: 47; also G. Maurer, 1996: 55.
- 13 M. Drihem in Le Matin, April 15, 2003.
- 14 E. Millet, 2003, p.104 & 107-109.
- 15 Conservation Biology, February 2001; research conducted by L. Martinoli, C. Capiluppi, M. Arahou & M. Mouna; available on <a href="http://www.conbio.net/SCB/Services/Tips/2001-1-February">http://www.conbio.net/SCB/Services/Tips/2001-1-February</a>, cfm.

- 16 G. Mounfort, 1965, p.171. For arguments in favour of hunting in Sefrou province, seen as a high-quality, job-creating industry, cf. L. Jennan, 1998, p.16-17; regarding lion-hunting project: "Des Espagnols sur le projet d'une réserve de chasse", *L'Économiste*, January 17, 2003, p.35.
- 17 F. Cuzin, "Les grands mammifères sauvages du Maroc", 1996, pp.108-109; also « Animal Info Morocco » (1999), available on http://www.animalinfo.org/country/morocco.htm
- 18 For Tirghist reserve and PNHAO, cf. A. Billand, *RGA*, n°4/1996: 97; also A. Bourbouze, "Des agdal et des mouflons" (1997), available on <a href="http://www.infra.fr/Internet/Produits/dpen/bourbc30.htm">http://www.infra.fr/Internet/Produits/dpen/bourbc30.htm</a>
- 19 Mustapha n-Ait Lho, Atlas-Hébdo, n°4/5-21 March, 2003: 16.
- 20 Dogs and poultry are frequently run over, muleteers injured through falling off frightened steeds. A young bystander was killed at Bu Wzemmou on 15/05/98 during the *Rallye de l'Atlas*.
- 21 G. Mountfort, 1965, p.169.
- 22 M. Kerbout, 1994, p.100.
- 23 Based on this writer's frequent on-the-spot observations (December 1983, February 1998, April 2001, May 2002, etc.). Must be confessed, however, that in April 2001, as partial atonement for this deforestation, young tree-planting volunteers were met at work on north-east fringe of Taarbat hill, an 'Ayyachi outlier.
- 24 Which is apparently not always the case. To quote AMTM President, Abdelhamid Ghandi: "Les décideurs ne donnent aucune importance au tourisme rural, malgré leurs discours prometteurs." ("Whatever promising noises they make, decision-makers grant little importance to rural tourism.") Interview conducted by Abdellali Darif Alaoui for Maroc-Hébdo, available on

http://www.maroc-hebdo.press.ma/Mhinternet/Archives 566/html 566/agenda.html

- 25 To preclude necessity for voluntary mammoth clean-ups as in Toubkal massif (2000 & 2002). Several 100-litre bin-liners, filled to the brim with Kleenex tissues and hygienic towels, were manhandled down to Imlil. Hopefully, an incinerator at the Toubkal hut, able to burn 300kg of waste per week, will now cope with the problem. Cf. *Trek Magazine*, n°15/ December 2000: 16-18.
- 26 This has been an unqualified fiasco in Bou Gemmaz-Mgoun area with Tilibit n-Tarkeddit and Izoughar huts vandalised by tourists and/or shepherds, and only the Assemsouk refuge functioning more or less satisfactorily; see also M. Peyron, "Quel avenir pour le tourisme en montagne", (1995: 110), & A. Bellaoui, RGA, 1996: 18.
- 27 ALD stands for Animateurs Locaux de Développement, Azilal Mountain Environment workshop, 1991, p.10.

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- 2/ "Compte-rendu de tournée dans l'Atlas marocain (septembre 1998)";
- 3/ "Apercu sur le Haut Atlas de Midelt et d'Imilchil (8-15 October, 1997)".
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