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From the desk of

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environment and cultures it visits. But sensitively managed, it can deliver sustainable livelihoods and a new generation of fans of the desert world.

These are among the findings of UNEP's Global Deserts Outlook being launched on this year's World Environment Day to mark the UN International Year of Deserts and Desertification. This year's slogan for the Day is 'Don't Desert Drylands' and the main celebrations are in Algeria.

Desertification is one of the hardest and most intractable environmental problems. Thirty-six countries are affected by it, or by land degradation, in Africa alone, and an estimated 75 per cent of the continent's farmland is rapidly losing the basic nutrients needed to grow crops. Some estimate the cost of this loss – in some of the poorest countries on Earth – as \$4 billion a year.

Traditional wisdom

Poverty is a primary driving force behind the process. It forces many farmers to cultivate marginal land continuously, without fallow periods, thus crippling it. We must urgently break this cycle by offering alternative livelihoods and regaining traditional land management and wisdom – and through direct measures like promoting agroforestry and harnessing the abilities of earthworms, beetles, fungi, bacteria, and other organisms to boost the fertility of the soil.

Otherwise the desert margins – where the drylands and the desert lands meet – will continue to witness an unsustainable battle, with tragic long-term consequences for both their ecosystems and their peoples ■

YOUR VIEWS

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The world's deserts, covering a fifth of its land surface, conjure up many emotions, many contradictory ideas. Hardship and romance, bareness and awe-inspiring beauty.

The driest places on Earth, they are home to 350 million people and some of the rarest and most curious species known. Culturally and spiritually they stand in the centre of at least two of the great religions. The desert was the backdrop to the life and teachings of the Prophet Muhammed, while Jesus was tempted by the Devil in one such wilderness.

Climate change

For some, deserts mean black gold: half the world's oil comes from them and three – quarters of oil reserves lie beneath their sands. For others they offer the opportunity of a low carbon, or even carbon-free, world, controlling climate change: makers of solar thermal power plants claim there is enough solar radiation hitting just one per cent of their surface to meet the whole world's needs.

Desert ecosystems support the growing understanding that the environment is not a luxury, but a key factor in overcoming poverty and an economic basis for livelihoods, true sustainable development.

Their often harsh and arid conditions have spawned animals and plants uniquely adapted to them. Flora in a variety of fantastical forms – sometimes able to lie dormant for years – burst,

like the fabled phoenix, into short-lived but highly productive life after rain.

Such super-fast growth and massive seed production – so essential for survival – has made many dryland plants the basis of agricultural societies. Wheat and barley evolved from desert annuals in the Near-East some 7,000-9,000 years in the past, as did maize and squash in southern Mexico around six millennia ago. Experts believe other food crops are waiting to be discovered in these unique natural laboratories.

Chemicals and pharmaceuticals, derived from micro-algae and medicinal plants that thrive in the year-round high solar radiation, are emerging onto global markets. Many scientists suspect that, given the unique evolutionary history of many desert plants, their real pharmaceutical potential has yet to be realized.

Deserts are even being used for fish farms. Shrimp are being grown in the high temperatures of the Arizona desert in the United States. And pilot projects in India's desert state of Rajasthan have found its saline water – which hinders crop growth – ideal for the purpose.

Desert romance

The romance of the desert – fueled by such classic literature as the Thousand and One Nights or Arabian Nights and films like Lawrence of Arabia – increasingly attracts tourists. Tourism can be a damaging extractive industry, consuming and subsuming the