Biodiversity law and the weeding out of alien species

By Ian Cox, Ilan Lax and Peter Britz

It took the threat of a court order, but the Minister of Environmental Affairs (Minister) has finally given effect to ch 5 of the National Environmental Management: Biodiversity Act 10 of 2004 (NEMBA) and published the alien and invasive species (AIS) lists and regulations. Rushed through on 1 August 2014, nearly eight years out of time, in order to beat the judgment in the matter of *Kloof Conservancy v Government of the Republic of South Africa and Others* (KZD) (unreported case no 12667/2012, 22-10-2014) (Vahed J), the lists proclaim 559 invasive species in terms of what is a bewildering matrix of areas, categories and exemptions.

The purpose of this article is to look critically at ch 5 of NEMBA and ask: Are the AIS lists and regulations lawful?

NEMA

NEMBA is one of the laws built around the framework that is the National Environmental Management Act 107 of 1998 (NEMA). NEMA is a human rights-based law that is intended to give effect to the environmental right contained in s 24 of the Constitution.

The Constitutional Court described the environmental right in these terms in *Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province, and Others* 2007 (6) SA 4 (CC).

'The Constitution recognises the interrelationship between the environment and development; indeed it recognises the need for the protection of the environment while at the same time it recognises the need for social and economic development. It contemplates the integration of environmental protection and socio-economic development. It envisages that environmental considerations will be balanced with socio-economic considerations through the ideal of sustainable development. This is apparent from s 24(*b*)(iii), which provides that the environment will be protected by securing "ecologically sustainable development and use of natural resources while promoting justifiable economic and social development". Sustainable development and sustainable use and exploitation of natural resources are at the core of the protection of the environment.'

NEMA gives effect to this purpose. It seeks to encourage sustainable development by integrating the environmental principles set out in s 2 of NEMA into development planning and implementation but always on the basis that people and their needs must be placed at the forefront of a decision maker's concern.

It should not be surprising given the human rights perspective of the environmental right that NEMA defines the environment anthropocentrically (human centred). The environment is thus not just the physical world we live in. It incorporates a human, people first perspective of the environment by including as an essential attribute of the environment, 'the physical, chemical, aesthetic and cultural properties and conditions' of that physical world insofar they 'influence human health and well-being'.

NEMBA and NEMA

NEMBA was enacted to provide for the management and conservation of South Africa's biodiversity. Sections 6 and 7 of NEMBA require it to be read in conjunction with NEMA and applied in conformity with the NEMA principles. Thus NEMBA must also be interpreted and applied so that the needs of human beings are placed uppermost and references to the environment must be consistent with the NEMA definition.

Chapter 5 of NEMBA

Chapter 5 of NEMBA deals with the management of alien species and the control of species that are to be listed as invasive. Alien species are dealt with in part 1 of ch 5 and invasive species in part 2. Chapter 5 also deals with genetically modified organisms in part 3 (that falls outside the scope of this article).

Alien species and NEMBA

NEMBA defines alien species as any species introduced deliberately or accidentally into South Africa by human beings at any time during human existence. Alien species cannot become naturalised under NEMBA. The principle is: Once alien always alien. Consequently many species that have been present in South Africa for centuries and which hugely benefit human health and wellbeing must nonetheless be managed under NEMBA because they are alien. For example, most species used in agriculture are alien.

Indigenous species can also become alien if they are introduced into areas within South Africa where they did not originally occur. These are called extra-limital indigenous species. It also follows that most so-called indigenous gardens in fact contain such alien plant species because those plants are not endemic to the area where the garden is located.

NEMBA legislates for the management of alien species including extra-limital indigenous species by prohibiting a wide range of restricted activities, unless the species is exempted by the Minister or the activity is authorised by a permit. The penalties for noncompliance are severe and could result in a fine of up to R 10 million or up to ten years' imprisonment or both.

No other country in the world has attempted such an ambitious or draconian scheme for defining or managing alien species. Yet, neither NEMBA nor NEMA, contains any policies, norms or standards that assist the Minister in deciding which alien species should be exempted or how permits should be issued. It is not surprising, therefore, that the Minister has abrogated most of part 1 of ch 5 by exempting all alien species lawfully introduced into South Africa.

Invasive species

Invasive species must be listed as such by the Minister before they are regarded as invasive. 'Invasive species' are defined as species 'whose establishment and spread outside of its natural distribution range –
(*a*) threaten ecosystems, habitats or other species or have demonstrable potential to threaten ecosystems, habitats or other species; and
(*b*) may result in economic or environmental harm or harm to human health.'

Section 73(2)(*b*) of NEMBA states that 'A person who is the owner of land on which a listed invasive species occurs … must take steps to control and eradicate the listed invasive species and to prevent it from spreading.' 'Control' is defined in NEMBA as meaning 'to combat or eradicate … or … where such eradication is not possible, to prevent, as far as may be practicable, the recurrence, re-establishment, re-growth, multiplication, propagation, regeneration or spreading of an alien or invasive species.'

Like alien species, the use of invasive species is strictly circumscribed through a process of permitting and exempting restricted activities. The same criminal sanctions apply. Unlike alien species, the issue of permits is limited in terms of s 91 to cases where the impact on biodiversity is negligible. Exemptions only apply to restricted activities as invasive species themselves cannot be exempted.

What is invasive?

There are no policies or norms and standards that assist the Minister in deciding what is invasive or inform the public how this decision is made. Department of Environmental Affairs (DEA) says that it lacks the capacity to give reasons for listing each of the 559 listed invasive species, which makes it difficult to identify the reasons underlying the Minister's decision to do this. This difficulty is compounded by the fact that many socially and economically useful species have been listed as invasive despite the legislated obligation to control such species by a process of eradication or prevention.

It is suggested that one reason why socially and economically useful species have been listed as invasive is that the definitions used in science for determining what is invasive are not the same as the legal definition. The science, which studies the impact of alien species on indigenous or native species is known as invasion biology. Invasion biology is a relatively new field of study with the result that there is still uncertainty among invasion biologists regarding the scope and nature of the science and even what is an invasion. For example, invasion biologists define invasive species either in terms of the capacity of self-sustaining alien species to spread over long distances or in terms of the capacity of those species to harm indigenous species (DM Richardson (ed) Fifty Years of Invasion Ecology (New Jersey: Wiley Blackwell 2011) at 413 (www.leg.ufpr.br/~eder/ebooksclub.org__Fifty_Years_of_Invasion_Ecology__The_Legacy_of_Charles_Elton.pdf, accessed 2-6-2015).

These scientific definitions of invasiveness are much wider than the definition contained in NEMBA. They are also wider than the legal definition of invasiveness as it is applied elsewhere in the world. Thus, for example, the recently promulgated European Union Invasive Species Regulations (Regulation of the European Parliament and the Council on the prevention and management of the introduction and spread of invasive alien species 2013/0307 (COD)) also define invasiveness in relation to the harm a species causes to human health and wellbeing.

The DEA's approach

The DEA adopts what it calls a science based approach to managing biodiversity. It relies heavily on invasion biologists to assist and advise it in the implementation of this approach.

The DEA does not accept that there is any difference between the scientific definition of invasive and the definition of invasive in NEMBA. In particular, it is of the view that its approach to listed invasive species is not limited to merely controlling these species, but includes the general management of invasive species even for the purposes of propagation for beneficial use. The Minister has thus introduced a scheme in the AIS list and regulations that allows for the continued use and propagation of socially and economically useful listed invasive species by listing them under four different categories (1(a), 1(b), 2 and 3).

Are the AIS lists and regulations lawful?

We do not think the AIS list and regulations are lawful. We see them as an invention of the DEA designed to try and fit a science based definition of invasive species in a legal scheme that defines invasive species in much narrower terms.

We contend that the DEA's 'science-based' approach ignores the anthropocentric nature of constitutional legislation and the balancing act that is required in the implementation of such laws through consultation and in particular the cooperative governance mechanisms set out in NEMA. We are concerned that the misalignment between this approach and the rights-based principles enshrined in the Constitution and carried through into NEMA not only poses a threat to human rights, but it has created a governance problem which can be seen, *inter alia*, in the huge delay in publishing the Environmental Impact Assessment Lists and Regulations.

At a technical level this approach also ignores the definition of control as it is applied to invasive species and the meaning of environment as it is used in that definition. Legal canons of interpretation demand the precise interpretation of words in order to ascertain the purpose and meaning of statutes. The SCA held in *Natal Joint Municipal Pension Fund v Endumeni Municipality* 2012 (4) SA 593 (SCA) that:

'Whatever the nature of the document, consideration must be given to the language used in the light of the ordinary rules of grammar and syntax; the context in which the provision appears; the apparent purpose to which it is directed; and the material known to those responsible for its production. Where more than one meaning is possible, each possibility must be weighed in the light of all these factors. The process is objective not subjective. A sensible meaning is to be preferred to one that leads to insensible or unbusinesslike results or undermines the apparent purpose of the document.'

Laws having penal consequences must also be interpreted narrowly (see, for example, *Democratic Alliance v African National Congress and Another* 2015 (2) SA 232 (CC)). NEMBA is such a law.

We therefore submit that when the definition of invasive refers to environmental harm one is not dealing only with harm to the physical world we live in. The harm to that physical world must also be sufficiently severe to harm human health and wellbeing. Likewise one cannot ignore the definition of control. Control in NEMBA means to eradicate and, if that is not possible, to prevent the propagation or spread of the species. This clear and plain meaning of control is, we argue, not compatible with the propagation of an invasive species for beneficial use such as would happen, for example, if the species is used in agriculture.

The application of this narrow legal definition of invasive would result in a much shorter list of invasive species than the 559 species that are currently declared invasive. This would result in a much more practical and cost effective approach to the implementation of NEMBA.

Conclusion

We, therefore, question the validity of the present AIS lists and regulations. We suggest that the DEA has misunderstood the anthropocentric nature of the environmental right. The intended implementation also disregards the meaning of control as it is used in ch 5 of NEMBA and the application of the constitutional principles of good governance and sustainable development articulated in NEMA. The root of the problem appears inherent in DEA's science-based approach. A solution may lie in a more integrated, balanced and constitutional approach, which admits the rights-based governance imperatives that exist outside of science and which concentrate on how South Africa can protect its biodiversity while at the same time sustaining the health and wellbeing of present and future generations of South Africans.

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