

Conservation in the Real World

Conservation, Planning (Leaf 1) and Linkages in the Landscape (Stream 1)
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Invasive Alien Plants and Protected Areas in South Africa

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Like all other countries, South Africa faces a particular challenge in terms of invasive alien species. These are plants, animals and microbes that have been introduced from other parts of the world, and have been able to displace indigenous species. It is widely accepted that invasive alien species are the single biggest threat to South Africa's biological diversity.

In 1995, following the country's first democratic elections the year before, the then Minister of Water Affairs and Forestry, Professor Kader Asmal, initiated the *Working for Water* programme. This is a labour-intensive initiative to control invasive alien plants, and took its name from the massive impacts that these plants are already having on our water security. In addition to the impacts on biological diversity and water security, these invasive alien plants are also having very significant impacts on the ecological integrity of our natural systems, the productive potential of land, the intensity of fires, flooding, erosion, the health of estuaries, water quality and the livelihoods of all those (and particularly the poor) who depend on the life-support systems that these invasive alien plants undermine.

Working for Water has been one of the country's greatest successes, having been associated with some 35 national and international awards, and this is illustrated in the exceptional increase in its budget – from R25 million (€4m) in 1995/6 to R442 million (€55m) in 2003/4. It has provided training and employment opportunities for upwards of 20,000 people, drawn from the poorest-of-the-poor, and has had a special emphasis on those who are most marginalized, such as by race, gender, age and disability; those from single-parent households; those fostering orphans; military veterans, former inmates and others in need of poverty relief support. Over one million hectares of land has been cleared of invasive alien plants over the past eight years. (However, the invasive alien plants are still spreading and growing at a faster rate than the programme is clearing them.)

There is no doubt that the social dimension of *Working for Water* has had a major influence on its growth and acclaim. By "mainstreaming" its conservation work, it has reached out across what are often barriers in conservation work. From an intellectual perspective, it is convincing to talk of the current impacts of invasive alien plants, and the catastrophe that lies in wait if we do not act quickly. But intellectual perspectives do not always win the day, and the approach that has been taken that adds optimal value across a variety of challenges facing the country, has paid off in many ways.

For all this success, the *Working for Water* programme has its share of challenges. It has been fairly criticized for not being sufficiently flexible in prioritizing emerging weeds (controlling them before they get out of hand) and other limitations in its planning. It has not had a clear mandate and authority, and as a consequence has used more "incentives" than "disincentives", has failed to optimize the necessary public and private partnerships, and has had many weaknesses in its planning, systems, structures and general management. The programme is reassessing its mission, objectives and strategy, so as to more closely align its benefits with the needs of its parent Departments, with other associated natural resource management programmes (such as combating desertification and Land Care), and with efforts to prevent and control other invasive alien species.

The recent development of the Biodiversity Bill has promised a massive step forward for *Working for Water* and South Africa's effort to contain the damage of invasive alien species. This has been further boosted by the establishment of the Secretariat of the *Global Invasive Species Programme* within South Africa. We have no option but to do this work, and *Working for Water* has provided a strong platform on which to build a world-class response to the scourge of invasive alien species.

That does not reduce the challenge for *Working for Water* to upscale its efforts in planning, to ensure that we do things optimally in terms of where we work, with whom we work, and upon what we work. There is no point in clearing densely infested areas downstream or downwind of a seed source, if the seed source is not controlled. There is no point in focussing all ones efforts on clearing an area if nothing is done to protect the area from other opportunistic invasives. There is no point in doing all this work if the land-owners are not committed and capacitated (including being forced) to maintain the gains that are made through follow-up work. There is no point in having attractive policies, strategic plans, business plans, annual plans of operation and all the other wish-lists, if there is no monitoring and evaluation of what is being achieved. There may be no point doing any of this if wild cards such as fires and emerging weeds undermine all the work that has been done – more so in the knowledge that these are both very difficult to combat, and require a flexibility seldom found in bureaucracies. And, above all, South Africa needs to learn that there is no point in spending billions of Rands on controlling existing invasive alien plants (and other species) if little is done to prevent new alien species taking their place.

Protected Areas and Working for Water

There is a particularly strong bond between *Working for Water* and protected areas in South Africa. These are, or need to be, the core areas of biodiversity conservation, and it is widely accepted within the management of protected areas in South Africa that the greatest threat to this mandate is through invasive alien species. *Working for Water* has only focused upon invasive alien plants, not having had the mandate or expertise to focus more broadly on invasive alien species.

A core aspect of our work in protected areas has been in the protection of watersheds. A recent and still-to-be-published estimated that the total natural mean annual runoff of our rivers will drop by at least 16% if we do not clear invasive alien plants from our catchments. This has led to a majority of our budget (almost R2.4 billion, or €300 million, over the past eight years) to have been spent in protecting key catchments. It can be argued that we have not invested enough in the “high-altitude” work, where logic dictates that the longer we take to eliminate invasives in difficult-to-reach areas, the more it will cost, relative to other areas, to control.

Many of these catchments have been critical to our protected areas. To take one specific example, the Sand River, which joins to form our most biologically diverse river, the Sabie River, brings the “life-blood” of water to parts of the Kruger National Park. Invasive alien plants and inappropriate alien plantations have threatened this catchment, and *Working for Water* initiated a programme called *Save the Sand*. This is a wide-ranging partnership that is having a real impact on the viability of a protected area, by working on outside influences that can determine its fate as a bastion of biodiversity conservation.

A recent break-through has been that our South African National Parks has agreed to set up an Invasive Alien Species unit, to co-ordinate all efforts to prevent, control or eradicate invasives. This will be a very useful pilot for *Working for Water*, and hopefully a precursor to our programme taking the full mantle of invasive alien species as its mandate.

The Santam / Cape Argus Ukuvuka Campaign

The *Ukuvuka* Campaign has been a specific project initiated by *Working for Water* and partners, in the Cape Peninsula National Park and its adjacent urban areas. *Ukuvuka* is a Xhosa word meaning “to arise” or “wake up”, and took its name from the need for the people of Cape Town to take note of the threats posed by invasive alien plants and uncontrolled wild fires. It raised funding of R34,5 million (€4,3 million) from four major companies, Santam (insurance), The Cape Argus (media), Nedbank (banking) and Total (petrochemicals), and a further R30 million (€3,8 million) from the City of Cape Town, for a four-year project. *Working for Water* and *Working for Wetlands* have also invested heavily in the Campaign. *Ukuvuka* has been invaluable not only in its work with its partners to arrest the threat of invasive alien plants and wildfires, and undertaking rehabilitation work, some exceptional work in fire prevention in informal settlements (having reduced shacks lost to fire by an astonishing 90%), and in public awareness. It has also been a major “learning curve” in terms of institutional and administrative efficacy, and in lessons in partnership management.

Working for Wetlands

A programme that grew out of the *Working for Water* programme, and the efforts of the Wildlife and Environmental Society's RENNIES Wetlands Trust (as it was then known), is the *Working for Wetlands* programme. Built on the same principles as *Working for Water*, this programme has a R30 million (€3,8 million) annual budget, and is engaged in wetland rehabilitation work in key catchments and areas of conservation importance, including in protected areas. It is a largely labour-intensive drive to restore the well-being of wetland systems, and then to apply follow-up support and regulations to ensure that the returns on these investments are realized.

Working on Fire

A similar off-spring of *Working for Water* has been the *Working on Fire* programme. Inspired by the local success of the Ukuvuka Campaign, and driven by devastating fires (inter alia) in the Kruger National Park (where 23 people died) and around the Tsitsikamma National Parks (where six people died, including five out of workers), this programme was launched last year. It has an annual budget of R20 million (€2,5 million), and is gearing up to provide aerial fire fighting capacity, rapid attack teams and ground teams doing preventative work, in pilot initiatives across the country. It has teamed up with the forestry industry-driven fire protection agencies in the eastern parts of the country, the Disaster Management capacity in the Department of Provincial and Local Government, and the forestry management capacity in the Department of Water Affairs and Forestry. Uncontrolled fires cost our country billions of Rands annually, and the impact on biodiversity and conservation, and perhaps particularly the spread of fire-adapted invasive alien plants, are unaffordable.

Conclusions and Recommendations

The above is not meant to paint a picture that we have our problems regarding invasive alien plants, wetlands and fire management under control. We most emphatically do not! Nor should it be read that those managing protected areas have done anywhere near enough to partner us in what are the biggest threats to their fulfilment of their mandates. But it is an indication that we have begun to take the steps that are necessary if we are to stave off these challenges.

We are working up towards a budget, capacity and mandate to do fulfil these obligations. What is critical is that we learn of the best management practices appropriate in the work that we are doing. For example, in combating invasive alien plants, the combination of mechanical, physical, biological agent, environmental (eg, fire) and chemical control has many permutations. Within that, we need to work on the use of incentives, disincentives, advocacy and research to bring about the right response from people and organizations.

The presence of the Secretariat of the Global Invasive Species Programme (GISP) in our country will surely rub off in what we learn from international best management practices. GISP has a critical role to play in the international response to invasive alien species, and South Africa, whose response to species other than certain invasive alien plants has been muted, can certainly learn from what GISP achieves. The New Programme for Africa's Development (NEPAD) also has potential to further the control of invasives in our continent and country, in concert with GISP.

A concluding point with respect to protected areas is surely that they are not islands. Far too many protected area managers in this country and throughout the world, remain insular thinkers, intent on protecting their "islands". They are not islands, of course, but investments that are profoundly influenced by factors over which these managers have little control. The answer is surely to reach out to the forces that control our destinies, and work in concert with them, and to find compromised that allow for mutual enlightened self-interest.

When *Working for Water* had clearing teams camping out in the Soetkraal area above the Tsitsikamma National Park, we found that only sixteen of the 120 workers were women (13%, instead of the target of 60%). Of those sixteen women, nine had unplanned pregnancies within the first year.

We initiated a Sexual and Reproductive Health programme with the community and other agencies, and have reduced the percentage of unplanned pregnancies by 85%, among what are now 73 women in 123 workers in the area. We have built a crèche-cum-multipurpose centre in the feeder settlement, and have worked with the authorities to ensure that we do what we can to build a better life for all those with whom we engage. It didn't cut down invasive trees in the short-term, but it surely helped to cut down more invasive trees in the long-term. END

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