

TRADE-OFFS NEEDED BETWEEN URBAN POLICIES AND CONSERVATION

CRL issue highlights need for more debate on environmental decisions

CHONG KWEK YAN
AND GIAM XINGLI

The proposal to construct the Cross Island Line (CRL) under a part of the Central Catchment Nature Reserve (CCNR), Singapore's largest nature reserve and home to its four reservoirs and hundreds of animal and plant species, is the latest example of environmental conflict in Singapore.

After the announcement of the CRL in 2013, the Land Transport Authority (LTA) commissioned a two-phase environmental impact assessment (EIA) of the project. Phase I, which is now complete, assesses the impact of site investigation work required to determine the feasibility of various route alignments. Phase II, scheduled to be completed at the end of the year, will assess the impact of tunnel construction.

In Parliament on Monday, Transport Minister Khaw Boon Wan urged Singaporeans to "keep an open mind, go with the facts ... and look for the evidence" as authorities mull over a host of factors before deciding on the CRL alignment. Many members of the public have jumped in on the debate surrounding the CRL through letters to the press, online articles and social media posts.

This issue has raised questions about environmental governance, decision-making and the meaning of nature reserves in Singapore.

GREATER TRANSPARENCY

The LTA's commendable decision to put the 1,000-page Phase I EIA report online for greater public accessibility is an unprecedented step forward for environmental governance in Singapore. This should be the standard practice for all future EIA reports.

However, there needs to be greater transparency in Singapore's environmental decision-making processes.

First, impact assessments are the exception, rather than the norm.

Singapore has long resisted calls for an open, mandatory form of EIA to be legislated. Environmental impact is usually assessed internally by relevant government agencies and is



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often unavailable for public scrutiny. While considered more efficient, this approach reduces opportunities for nurturing talent and developing environmental expertise in the private sector. In addition, it precludes voluntary engagement by potential stakeholders.

The Phase I report for the CRL EIA actually does a commendable job in outlining potential impact on flora and fauna, and laying out a comprehensive list of strategies aimed at mitigating damage. It was conducted by an environmental consultancy firm and incorporated inputs from the Nature Society (Singapore).

Improving on this as a blueprint and developing it into a consistent framework would instil greater public confidence in the process and the quality of environmental decisions.

Second, one area to improve is the lack of proper definitions and clear guidelines on how the information in an assessment is used to decide whether work should proceed.

In spite of the impressive list of strategies, the EIA concluded that work would have "moderate" impact even after mitigation.

The parameters for making the decision on whether or not to proceed

with site investigation given the hierarchy of impact categories were not explicitly set out. Should work proceed only if the impacts are minor or can it proceed even if they are moderate?

Another key issue is that "moderate" impact is defined as one that has not breached a legal or "acceptable limit" or has been reduced to a level that is "as low as reasonably practicable".

Since there is no established legal upper limit for impacts to biodiversity in Singapore, it would be impossible to evaluate whether an impact is beyond moderate. For example, while there are legal limits on environmental noise levels for humans, these cannot reasonably be applied for non-humans.

The rotary coring of boreholes generates extreme levels of noise, but the EIA report states that little is known about the impact of noise on wildlife. Therefore, what is an acceptable limit is also undefined. Further, what is practicable may still be ecologically damaging.

The Precautionary Principle underpins the science of conservation. It means to err to the side of caution when we have imperfect information. Going by the principle, any im-

pact beyond the natural fluctuation in baseline levels experienced by wildlife on a normal day should be avoided. Given the status of the CCNR as a nature reserve, the principle should be applied.

WITHER NATURE RESERVES?

Third, there needs to be more debate over the significance of nature reserves in Singapore.

Protected areas form the foundation of global efforts for keeping the world's diverse ecosystems intact and for preventing species extinctions. However, these tend to be at odds with economic interests such as infrastructure-building and resource exploration. For example, the Tanzanian government revealed plans to build an expressway through the Serengeti National Park. Ecuador recently issued permits for oil exploration in the Yasuni National Park.

The CCNR is one of four nature reserves in Singapore. Although small in area, our nature reserves are rich in biodiversity and they contribute to the global network of protected areas.

In Singapore, nature reserves and national parks are land areas that are accorded the highest level of protection. However, for nature reserves, this protection has been challenged and ceded more than once since our independence as a nation. Pandan Nature Reserve was degazetted in 1968, while the Labrador Nature Reserve was downgraded to a nature park before being reinstated in 2002.

There are other nature areas in Singapore aside from the nature reserves. As a result of an increasing appreciation of nature, parks such as Springleaf Nature Park, Coney Island Park and, most recently, the Kranji Marshes have been established. The official stance is heartening: To keep these undisturbed for as long as possible.

But if activities with a moderate level of impact are still allowed to be carried out in nature reserves, what precedent does it set for our nature areas? In our early days as a nation, we could argue that the economic stakes were high; today, we should be in a better position to confer a suitable level of protection for the places that we accord the status of a nature reserve.

The debate over the route alignment of the CRL is the latest incident that has forced us to confront the way we make environmental decisions in Singapore. With the dwindling of natural vegetation in Singapore over the years, the sooner we have these debates, the better.

● Chong Kwek Yan is a National University of Singapore overseas postdoctoral fellow currently based at the Centre of Excellence for Environmental Decisions, University of Queensland, Australia. Giam Xingli is a postdoctoral research associate at the University of Washington.