



새와 생명의 터 Birds Korea

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Songdo University Global Campus: Investing in Wetland Infilling

Dear Professors and Faculty Staff,

Birds Korea is a specialist non-government organisation based in Busan (Republic of Korea), working for the conservation of birds and their habitats in Korea and the wider Yellow Sea Eco-region. Our work aims to promote genuinely sustainable development, as defined by the United Nations and as targeted by the United Nations' global Millennium Development Goals

We are writing today to provide some further background information on Songdo's international importance for migratory bird species, many of which are threatened by further reclamation of inter-tidal wetlands. Please note that "reclamation" is defined throughout as the conversion of natural wetland into dry land by mechanical means.

This information, along with clarification of some of the conservation obligations that already exist relating to reclamation and the resultant declines in biodiversity under e.g. the intergovernmental Ramsar Convention (Ramsar) and the Convention on Biological Diversity (CBD), should be of value we believe to any discussion on the ethics and business cost / benefit analysis of investing in recently-reclaimed wetland at Songdo.

This is especially as, in line with scientific conservation literature, the link between reclamation and biodiversity loss is proven (e.g. Burton *et al.*, 2003; Burton *et al.*, 2006; Moores *et al.*, 2008); many species dependent on inter-tidal wetlands in the Yellow Sea and in East Asia are in decline, due largely to reclamation especially of "key staging areas" (e.g. Stroud *et al.*, 2006); and the link between biodiversity conservation and good business sense is also becoming increasingly apparent (e.g. TEEB, 2010).

The International Importance of wetlands at Songdo

Regular presence at a wetland of one or more species of waterbird in 1% or more of their population, or of 20,000 individuals of a species, or the presence of an assemblage of rare or threatened waterbird species, is used to identify that wetland as "internationally important" by Ramsar (Ramsar Rec. 4.2: Criteria for Identifying Wetlands of International Importance). Such internationally important wetlands are national (and global) priorities for conservation.

In recognition of this, Strategy 2.7 of the Ramsar Strategic Plan 2009 – 2015 states that Contracting Parties (i.e. governments) should carry out "Appropriate management and wise use achieved for those internationally important wetlands that have not yet been formally designated as Ramsar sites..."(Ramsar 2009b), in addition to those wetlands already designated as Wetlands of International Importance under Ramsar.

More generally too, Ramsar Contracting Parties "have committed themselves to formulate and implement ...planning so as to promote, as far as possible, 'the wise use of wetlands in their territory' (Article 3.1).... which has been interpreted as being synonymous with 'sustainable use'" (Ramsar 2009a).

However, as Ramsar is not considered to be legally-binding by many of its Contracting Parties (though it is by some: Ramsar 2009a), this obligation tends to be more moral in nature, placing much of the burden on decision-makers in government and business to decide what is ethical and genuinely sustainable.

Of the numerous bird species recorded at Songdo, Birds Korea's own research since 2006 has identified at least 11 species of waterbird that are still supported by the Songdo intertidal wetlands in Ramsar-defined "internationally important concentrations" (Moore *et al.*, 2010). These 11 species are listed in the table at the end of this letter.

The presence of 11 or more species of waterbird staging, wintering and in some cases breeding in internationally important concentrations at Songdo, including two that are globally Endangered (Black-faced Spoonbill *Platalea minor* and Nordmann's Greenshank *Tringa guttifer*) and three that are globally Vulnerable, indicates the great importance to avian and other biodiversity of this wetland. These waterbird species are a key component of the "ecological character" of the wetland.

By meeting the Criteria for Identifying Wetlands of International Importance, the Songdo inter-tidal wetlands should be designated as a Ramsar site, or at the very least conserved and managed in line with Ramsar Strategy 2.7 in order to maintain their ecological character, including (most especially) their waterbird populations.

Despite these formal commitments and the presence of globally threatened waterbirds, well-publicised by domestic media and well-known to local developers (see e.g. Rhee 2009) the inter-tidal wetlands at Songdo have not been designated as Ramsar wetland.

Rather, large-scale reclamation of inter-tidal wetland, proposed at least since the mid-1980s, has grown in pace and has in the past 15 years or so resulted in the loss of >4,000 ha of internationally important wetland there. While bird survey has not been comprehensive, reclamation at Songdo since 2001 has already resulted in the loss of the internationally important concentrations of probably two species (the globally Vulnerable Chinese Egret *Egretta eulophotes* and the globally Vulnerable Relict Gull *Ichthyaetus relictus*), formerly both found in internationally important concentrations on Songdo's tidal-flats, including those recently reclaimed for the Songdo Global University Campus.

In addition, a further 715 ha of inter-tidal wetland immediately adjacent to the area designated for the Songdo Global University Campus, is now in the process of being reclaimed.

Final permission to reclaim this area was granted in March 2009 (Birds Korea. 2009), only six months after the national government formally committed itself to preserving tidal-flats and to permitting "no more large-scale reclamation" (Ramsar Resolution X.22). Based on popular media accounts this reclamation, along with further infilling and development of other recently-reclaimed area at Songdo, is ongoing despite the very high level of debt presently sustained by Incheon City (in excess of 5.5 Billion USD), and in hope of prestigious overseas investment (Song, 2010).

While approximately 300ha of inter-tidal wetland and shallows will apparently be left unreclaimed by the ongoing reclamation of Area 11, the wetland that will remain is the outer, low-lying part of the remaining tidal-flat. This area will be inundated for a longer time by high tides, meaning that there will be a greatly reduced period of feeding time and a large reduction in feeding and roosting areas for key waterbird species, all of which need exposed tidal-flats for feeding.

As all 11 of the bird species still supported in internationally important concentrations at Songdo are ecologically dependent on inter-tidal wetlands, it can be confidently predicted, based on a range of detailed studies conducted elsewhere, that the loss and degradation of remaining tidal-flats there will lead to a decline in the number of individuals of birds that will be supported by the wetland, and in some / many cases, a decline even at the population level.

Habitat Change and Biodiversity Loss: an international perspective

"Habitat change" is, perhaps unsurprisingly, listed first among the five principal causes of global biodiversity loss identified by the Secretariat of CBD (*Global Biodiversity Outlook 3*, 2010), and in *The Economics of Ecosystems and Biodiversity Report for Business* (TEEB, 2010).

While such habitat loss and degradation at Songdo, and any resultant decline in biodiversity, might be considered by some to be a domestic issue, all 11 of these waterbird species are migratory. One of them (the Dunlin *Calidris alpina*) can even be considered as a North American species based on bird-banding initiatives by the US Fish and Wildlife Service. Such studies, supported by observations of



Alaskan-banded birds in the Republic of Korea, confirm that at least some Alaska-breeding Dunlin migrate through the Republic of Korea on migration or spend the winter here (Moore *et al.*, 2008).

The migratory nature of these species means that reclamation at Songdo has already caused and (if it continues) will inevitably cause further declines not only in biodiversity at the national level, but also internationally.

In this regard, it is important to note both the Preamble to Ramsar (“RECOGNIZING that waterfowl in their seasonal migrations may transcend frontiers and so should be regarded as an international resource”) and CBD Article 3:

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

(CBD Article 3, at: <http://www.cbd.int/convention/convention.shtml>).

Based on all of the above, it is our understanding that reclamation at Songdo is responsible for a decline in waterbirds and ecological character not only at Songdo and the areas directly impacted by reclamation, but also of all “other” wetlands that previously supported these same migratory waterbirds during different stages of their biological cycle. Further decline or loss of biodiversity and ecological character at Songdo will therefore lead to further loss of an “international resource” and cause further “damage to the environment” of States outside of the Republic of Korea, including the United States of America.

It therefore remains unclear to Birds Korea why further reclamation continues to be promoted in the Republic of Korea, when the nation’s own National Report to CBD (MOE 2009) also identifies the threat to biodiversity of reclamation, and when other less environmentally-destructive options are available.

Moreover, we are especially concerned that, based on media accounts, a major impetus for such reclamation appears to be the promise of prestigious overseas direct investment. For this reason, Free Economic Zones targeting overseas investors have been established not only at Songdo, but also at Saemangeum and in the Yellow Sea Free Economic Zone (Dong-A Ilbo, 2010), with internationally important inter-tidal wetlands in all three areas presently being reclaimed (see e.g. Birds Korea, 2008).

We believe that unless very clear concerns over biodiversity loss are expressed by overseas investors, overseas investments at Songdo and elsewhere on recently-reclaimed land will likely lead to (1) further reclamation projects and (2) a reduction in the possibility of restoration of those inter-tidal wetlands that are presently being reclaimed / have recently been reclaimed.

Most respectfully, we would like to close by reiterating that, in common with many other organisations (both domestic and overseas, including the US-based SAVE International), we believe that overseas investment in the Republic of Korea is positive and most welcome, but investment, whether from overseas or domestic, should not be at the cost of further biodiversity loss, entailing an erosion and denial of existing conservation obligations.

With thanks for your kind consideration,

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Nial Moores
Director Birds Korea
IUCN SSC Member

Species Recorded in Internationally Important Concentrations at the Songdo Tidal-flat since 2006

		Global Status	Peak Count (Song Do Tidal Flat Only)	% of Flyway or Global population
Black-faced Spoonbill	<i>Platalea minor</i>	Endangered	58	4%
Eastern Oystercatcher	<i>Haematopus (ostralegus) osculans</i>		108	1%
Mongolian Plover	<i>Charadrius mongolus</i>		1000	1.5%
Black-tailed Godwit	<i>Limosa limosa</i>	Near-threatened	7950	5%
Eurasian Curlew	<i>Numenius arquata</i>	Near-threatened	1000	3%
Far Eastern Curlew	<i>Numenius madagascariensis</i>	* Vulnerable	870	2%
Common Greenshank	<i>Tringa nebularia</i>		3000	3%
Nordmann's Greenshank	<i>Tringa guttifer</i>	Endangered	11	1%
Great Knot	<i>Calidris tenuirostris</i>	* Vulnerable	8000	2%
Dunlin	<i>Calidris alpina</i>		6000 – 14,800	1%
Saunders's Gull	<i>Larus / Chroicocephalus saundersi</i>	Vulnerable	480	6%

Global Status is from BirdLife International on behalf of the IUCN; and “% of Flyway or Global population” is based on population estimates in Wetlands International (2006). Both are used formally by the Ramsar Convention and CBD.

* Species previously not listed as globally threatened, but so listed in 2010 due to rapid global declines attributed to reclamation in the Republic of Korea and the Yellow Sea, leading to rapid declines in the Yellow Sea and in the species' non-breeding (wintering) areas in Australia.

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