Jeju Civilian–Military Complex Port and Environmental Conservation
The Port Status
What is Jeju Civil–Military Complex Port?

A project to install civil–military complex port on south of Jeju to hold navy ships & civilian cruises through 2006~2015

<table>
<thead>
<tr>
<th>Gross Area: 490,000 m² (5,274,316 sf²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Acquisition 290,000 m²</td>
</tr>
<tr>
<td>- reclaimed 200,000 m²</td>
</tr>
<tr>
<td>Port Construction</td>
</tr>
<tr>
<td>- Navy port: 2,400m</td>
</tr>
<tr>
<td>- Cruise port: 2,500m</td>
</tr>
<tr>
<td>(holds 2 150,000GT cruise ships)</td>
</tr>
<tr>
<td>Water front Construction:</td>
</tr>
<tr>
<td>- command/administrative / maintenance facilities, ETC</td>
</tr>
<tr>
<td>Access Road to Cruise: 2.5km</td>
</tr>
<tr>
<td>Cruise Facilities: 50,000 m²</td>
</tr>
</tbody>
</table>
Goal: Making an Eco-Friendly civil–military complex port

Budget executed: 22% (Aug. 2012)

* Acquisition of land & compensation for fisheries completed (2010)

Port Construction process rate: 19% (Aug. 2012)

* Port structure/protection blocs manufactured/installed, dredging, site preparation on-going

Water-front Construction: Basic planning started (May 2012)

Carry Out the Plan to Complete the Project by 2015
2-1. Why Jeju?

Military Function

- Need for a home port to hold middle/large-sized naval vessels
- East-West Sea assets easily dispersed & stationed
- Peace time: SLOC easily protected, Operation easily carried out
  - eg) Chunghae Unit, Multinational Operations (humanitarian)
- Wartime: easily reinforced, Supplies protected

Guarantees Flexibility & Mobility Geographically & Strategically
2-2. Why Jeju?

Civilian Function

Reflected local opinion of Jeju
- National plan/will to settle the controversy

Contributes to Jeju tourism industry
- No port for 100,000GT+ cruise ships
- Maximize utilizing nature of Jeju into tourism

A port that coexists with locals
- Maximize local development support from the central government

Synergy Effect of Development of Jeju & Civil-Military Port
Dec. ’93: **the first national plan for national security**

’05 ~ ’07: Project presentation for people of Jeju
   (more than 100 debates and presentations)

Apr. ’07: **Gangjeong Village proposed as a site for the base**

June ’07: Jeju, decided on a final candidate based on a poll

Sept.’08: Decision to build a **civilian–military complex port**
   (Council for National Policy Coordination)

’08 ~ ’11: **Approved** (Environmental Effect Assessment, reclaiming,
   cultural property assessment, etc.)

Jan. ’10: **Harbor construction contracted/started** (Mar.’12)

May ’12: **On-Shore construction basic planning started**

---

**A National Security Project by Democratic Process with Approval from 4 Gov. for 20 Years**
Jan.~Mar.’07 : Mass-Discussion of Jeju on the base (TV, twice)

Apr. ’07 : Jeju Gov.-Assembly agreeing on policies regarding the base
   * Candidates selected based on public poll by people of Jeju

Apr. ’07 : Gangjeong proposed for candidacy (→Jeju)
   * 7 Opinion-gathering process with various councils of the village
   * 110 residents present, 87 voted in favor (quorum: 51)
   * 695 residents of Ganjeong signed consent forms (16 Aug.)

May ’07 : Jeju, notified selected candidacy (→ MND)
   * People of Jeju: 1,500 / Candidate area: 1,000 each
   * Jeju: 54.3% in favor, Daecheon (Gangjeong): 56.0% in favor
   * Namwon (Wimi): 36.1%, Anduk (Hwasoon): 42.2% in favor

June ’07: MND, site decided & confirmed (→ Jeju)

Gathered Local Opinion,
Construction Site Selected by Democratic Process
Aug.’07~Oct.’08: Pre-environmental assessment
Jan.~June’09: Co-Investigation on biosphere (twice)
   * Opponent recommended agencies participated

Sept.’09: Construction Site, Change of Status (C.H.A)
Dec. ’09: Agreement on environmental effect assessment, Absolute Conservation Area changed (Jeju/Assembly)
   * exhibition for residents (14 Apr.~13 May)
   presentation (24 Apr.), hearing (24 June)

Mar. ’10: Defense • military facility execution plan change approved (MND)

Apr. ’10: Reclaim/execution plan approved (Busan Regional Maritime Affairs & Port Office)

Jan. ’12: Cultural heritage excavation completed on construction site/usage approved (C.H.A)

July ’12: Legitimacy recognized by the Supreme Court
Conservation Measures

Building Eco-Friendly Civilian-Military Port (Green Base)

- Applying eco-friendly construction methods from the planning to construction

Eco-Friendly Methods for Harbor Construction

- Free-current pier
- Solar energy lighthouse
- Wave power generation system
- Cruise ‘Ole’ walking path
- Contamination Prevention Film & Adaptors
  (Preventing diffusion of floating sand, foundation rocks dropped through pipes)
Waver Power Generation System
Cruise ‘Ole’ Walking Path
Installing Double Contamination Prevention Film (Preventing Diffusion of Floating Sand)
Conservation Measures

Eco-Friendly Methods for On-Shore Construction

- Waterside Parks Conserving Natural Coastline
- Green Buffer Zone around the Base
- Green Zone on Rooftops
- High-Efficient LED Lights
- Solar Energy Generation System
Waterside Parks Conserving Natural Coastline
Green Buffer Zone around the Base
Green Zone on Rooftops
High-Efficient LED Lights
Solar Energy Generation System
Effects on the Nature of Jeju

- At least 10km away from World Heritage / No Effect

Map showing the location of Mt. Halla, Construction Site, and Sungsanilchulbong Key Area.

Legend:
- Key Area
- Buffer Area
Effects on the Nature of Jeju

Global Geoparks Widely Spread on Jeju Island, with No Direct Effect

* JusangJeolidae, Seogwipo Shellfish Fossils are at least 5km away / No Effect
Effects on the Nature of Jeju

Biosphere Conservation Area at least 1.5km away
/ No Effect

* Seogwipo Harbor was built only 500m away from nearby Isle Moon, still no effect on coral reef observed
Conservation of Coral Reef

No Coral Reef Found in the Construction Site, but Carrying out Conservation Measures for Nearby Coral Reef

- Status Change Considered by and Approved from Cultural Heritage Administration: No Coral Reef Found
  * No coral reef found in the investigation by 5 opposition parties (May, ’11) and environmental organizations (July, ’11)

- Early-Warning System Established Observing Density of Floating Sand: with Periodic Examination and Management
  - surface buoy, floating sand density change, oxygen level change

- Seasonally Monitoring the Inhabitation of Coral Reef, So far 6 examination carried out: No disturbance

- Inductor for Natural Insertion of Coral Reef Installed (17 Feb. ’11 / 10 Specially Manufactured Inductors)
Result from Underwater Investigation on Sea Bottom on the Construction Site

The sea bottom on the construction site composed of sand: no coral reef
Conservation of Coral Reef

Monitoring Coral Reef Inhabitation
Conservation of Coral Reef

Installing Inductors for Natural Insertion of Coral Reef
(17 Feb. ’12 / 10 specially manufactured inductors)
Conservation of Endangered Species

Red-Feet Crabs: 328 relocated

⇒ Seasonally monitoring: Inhabitation well settled
Narrow-Mouthed Toads: 8 adult form (July '12), 900 tadpole (June~Sept. '11) / Stone Cultural Park

Continually monitoring, and additionally relocating
Conservation of Other Species

Fresh Water Shrimps: 5,300 relocated (Oct.~Nov. '11) / Gangjeong stream

⇒ Seasonally monitoring through post-environmental assessment
Understanding Absolute Conservation Area

0.06% (0.105 $km^2$) of the Conservation Area (183.84 $km^2$) reduced due to the construction

* Status change considered and approved: Dec. ’09

(Jeju Government/Assembly)
Understanding the Coast Rock, Gureumbi

Origin of the Name

“Litsea japonica Juss” a kind of broadleaf tree, also known as “Gureumbinang” widely spread over the Gangjeong coastline.

Sanctified and idolized by some religious/social organizations since April ’11. 4

* 10% of Jeju coastline (40km) has similar geological characteristics

Necessity of Conservation

Result of Site Examination by Cultural Heritage Administration: no need for conservation

* No unique volcanic landscape found around Gangjeong coastline

Some part of the rock to be preserved as the waterside park considering local sentiments