

Relationship of *Marine Cadastre* and *Marine Spatial Planning* in Indonesia A Case Study

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Outline

- Background
- Cadastre Concept
- Marine Cadastre
- Marine Spatial Planning
- Case Study: Balikpapan
- Recommendation



(Williamson, 1999)

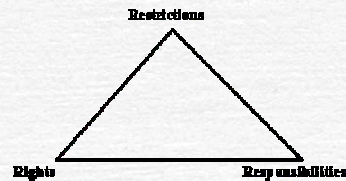
Background

A *cadastre* is normally the basis or core of land administration system containing a record of interests in land (e.g. *rights, restrictions and responsibilities*).

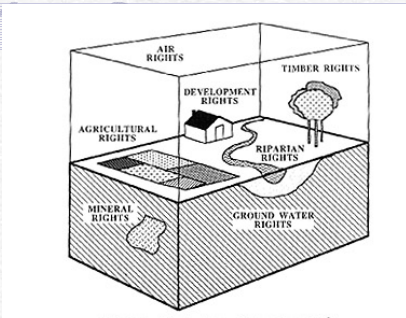
It usually includes a geometric description of land parcels linked to other records describing the nature of the interest and ownership or control of those interest, and often the value of the parcel and its improvements (FIG, 1995).

Background

It could be said that we do not really own the land itself, but rather own the right to use the land in conformity with community laws, practices and expectations.



Rights



(Dale and McLaughlin, 2000)

Discontinuity of land and marine cadastre

- What about Marine ?
- Current cadastre only cover land and stop at *High Water Mark* (HWM).
- The interaction of various rights and responsibilities in time and space of marine environment imposes complexities that do not occur with land based spatial data.

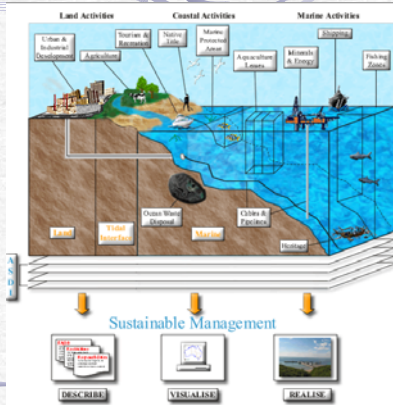
Discontinuity of land and marine cadastre

- There should be a structured administration of land and marine interface area
- An integrated administrative structure is required in order to better administer the range of *rights, restrictions and responsibilities* in both the land and marine environment, especially in the coastal zone
- Marine cadastre as an infrastructure contains dynamic information and accessible

Marine Cadastre

A system to enable the boundaries of maritime rights and interests to be recorded, spatially managed and physically defined in relationship to the boundaries of other neighbouring or underlying rights and interests (Williamson and Widodo, 2001).

Marine Cadastre



Indonesian Context

- The Basic Agrarian Law in 1960, then publicly known as the office of registration of title (right) and transfer of title on land with the issuance of certificate, be a certificate of ownership or property right, right to build, right to cultivate and right to use.
- The Basic Agrarian Law of 1960 focuses on land administration, land management and land registration.
- The subject of *marine cadastre* has been widely discussed among various institutions on various aspects such as legislation, mapping, extension of land taxes to marine uses, marine spatial planning as well as institutional set up for this new subject of governance.

Marine Spatial Planning

- Dept. of Marine Affairs and Fisheries, Rep. of Indonesia has a role to develop the concept of marine spatial planning, as part of integrated spatial planning (BKTRN, 2003).
- Some keywords in *marine spatial planning* (after WWF, 2003):
 - considering the overall objectives
 - possibility to reduce conflicts of use
 - decision making includes cumulative effects and combination
 - forward looking
 - provides clear mechanism, easy access for stakeholder and clear roles in planning and management of marine activities

Marine Spatial Planning

- Elements of marine spatial planning (after WWF, 2003):
 - strategic environmental assessment
 - data exchange and coordination
 - risk assessment
 - ecological, socio economic and spatial mapping (GIS)
 - public consultation

Spatial Plan (RTRW) Balikpapan 2005 - 2015

- Environmental friendly
- Integrating *terrestrial* and *coastal-marine* environment
- Public Consultation (watershed based 8, stakeholders 8)
- MoU (Mayor of Balikpapan, Dept. of Marine Affairs and Fisheries, Coastal Resources Management Project II), Balikpapan, June 2, 2004

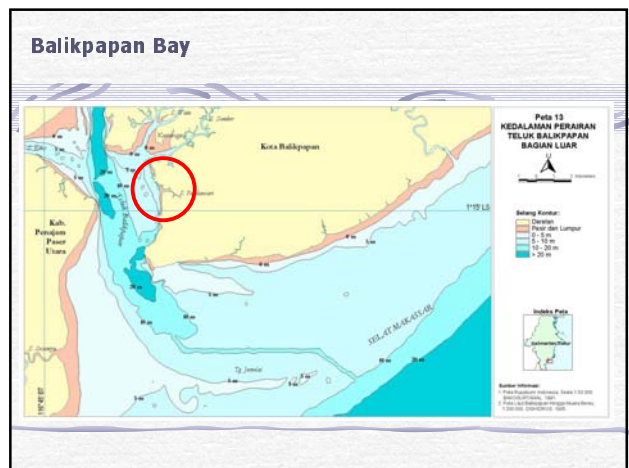
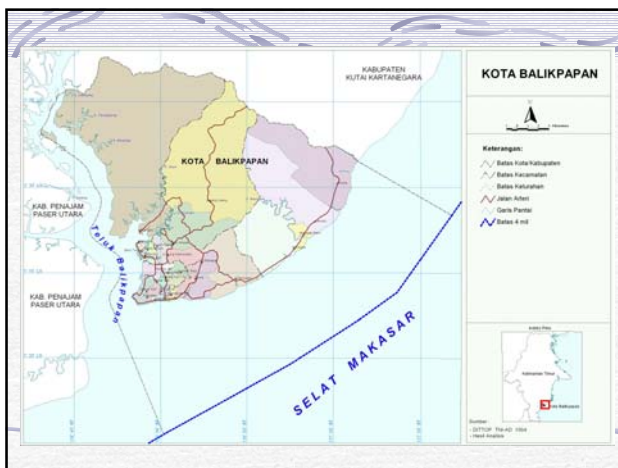
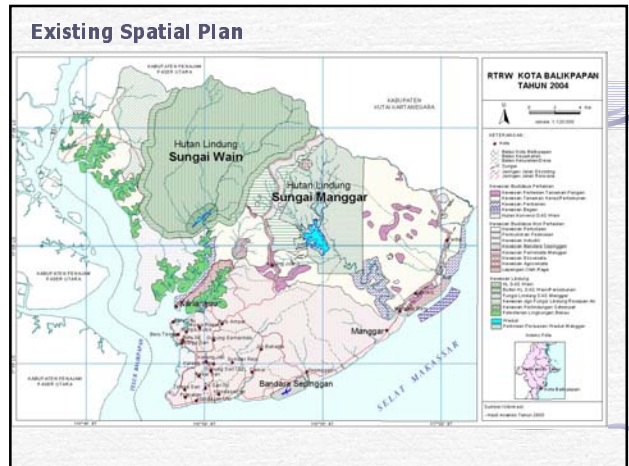
City of Balikpapan

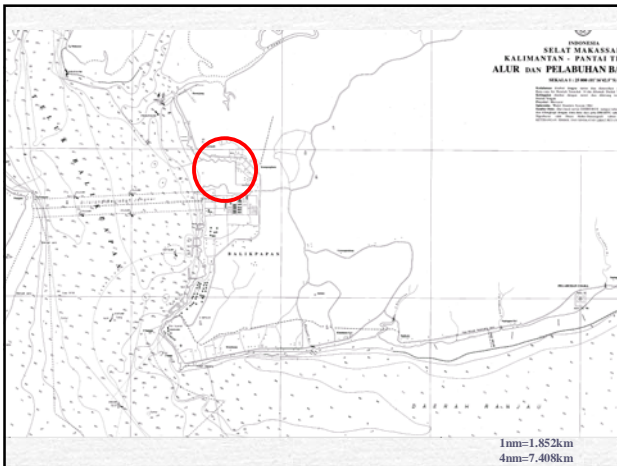
- Vision:
centre for services, trading and industrial activities
Beriman (Bersih, Indah, Aman, Nyaman)

"The Best City for Living and Doing Business ..."

- Issues and Challenges :
 1. Kariangau Industrial Area (KIK)
 2. Warehousing relocation from Somber to Kariangau
 3. Illegal logging – (HLSW) Wain River
 4. Tourism - Manggar
 5. Buffer zone along Trans Kalimantan (Balikpapan – Banjarmasin)
 6. DAS Manggar – watershed and conservation area

- Strategic Plan (Renstra) Balikpapan Bay



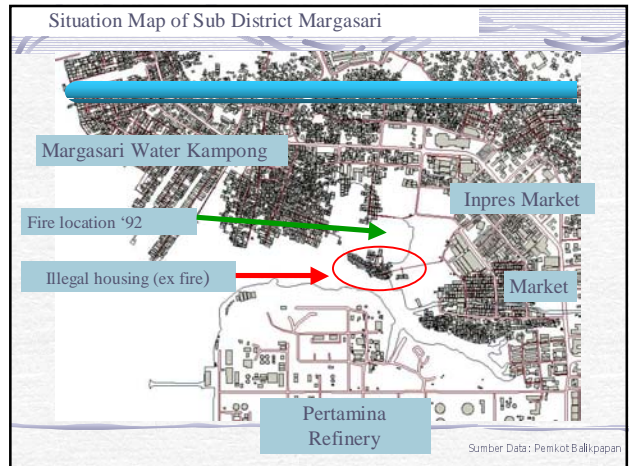


Sub District Margasari (Balikpapan)

- Traditional water 'kampong'
- Slummy are
- High density population
- Fire sensitive area – close to refinery
- Traditional market's waste
- Informal settlement

1977

2000



PROGRESS

T21 - Couple

T36 - 1 Floor

T36 - 2 Floors

Docking

Health Facility

PROGRESS (Cont.)



High Tide



Community Road



Access Road



Public Space

MANGROVE CONSERVATION



Spatial Planning Policy

1. Use of Spatial Plan to integrate various programs
2. Institutional and capacity building, especially local
3. Partnership and public participation in the development of Spatial Planning
4. Transparency
5. Law enforcement

Recommendation

- Indonesia faces an immense tasks to manage and administer its ocean space, in addition to its land where 60% of its population live on the 7% of land area. A reformation and institutional restructuring should consistently be pursued.
- Devolution of power and manpower from the central government to the autonomous regions should be *consistently* and conscientiously implemented.
- A statutory body should be established to *administer* and *manage* the ocean space, including administering the marine and cadastral boundaries at sea

Thank You

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Balikpapan Bay