



Presented at the FIG Working Week 2025,  
6-10 April 2025 in Brisbane, Australia

Collaboration, Innovation and Resilience: Championing a Digital Generation

Brisbane, Australia 6-10 April

# Valuation and Natural Capital - an emerging sector for land professionals (JK)

11:30 – 13.00 P10 - Climate and Disaster (Climate TF) 385

James Kavanagh MRICS C.Geog MCInstCES

Royal Institution of Chartered Surveyors (RICS), London, UK

[jkavanagh@rics.org](mailto:jkavanagh@rics.org)



PLATINUM SPONSORS



CHCN AV





**WORKING  
WEEK 2025**

AND

**Locate25** | **G**  
THE NATIONAL GEOSPATIAL CONFERENCE

Collaboration, Innovation and Resilience:  
Championing a Digital Generation



**Geospatial**  
Council of Australia

Brisbane, Australia 6–10 April

- Introduction & Background
- RICS outputs - Impact of carbon markets on the rural economy
- Valuation and carbon trading
- Examples
- Carbon trading and tenure security/land rights
- Conclusions

ORGANISED BY



**Geospatial**  
Council of Australia

PLATINUM SPONSORS



Australian Government

CHCNAV

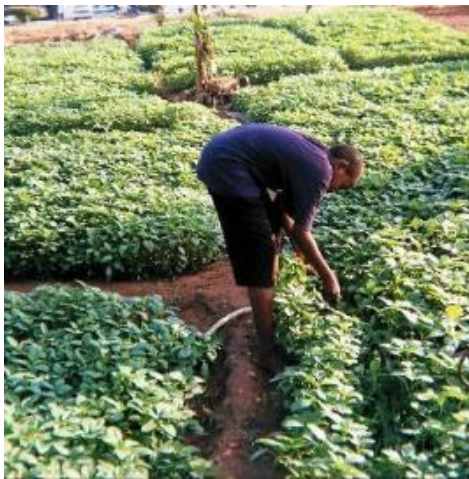


THE SCIENCE OF WHERE™



# Manual for the Valuation of Unregistered Land

**“Market Value** is the estimated amount for which an asset or liability should exchange hands on the valuation date between **a willing buyer and a willing seller** in an **arm’s length transaction** and where the parties had each acted **knowledgeably, prudently and without compulsion** (IVS 2021)



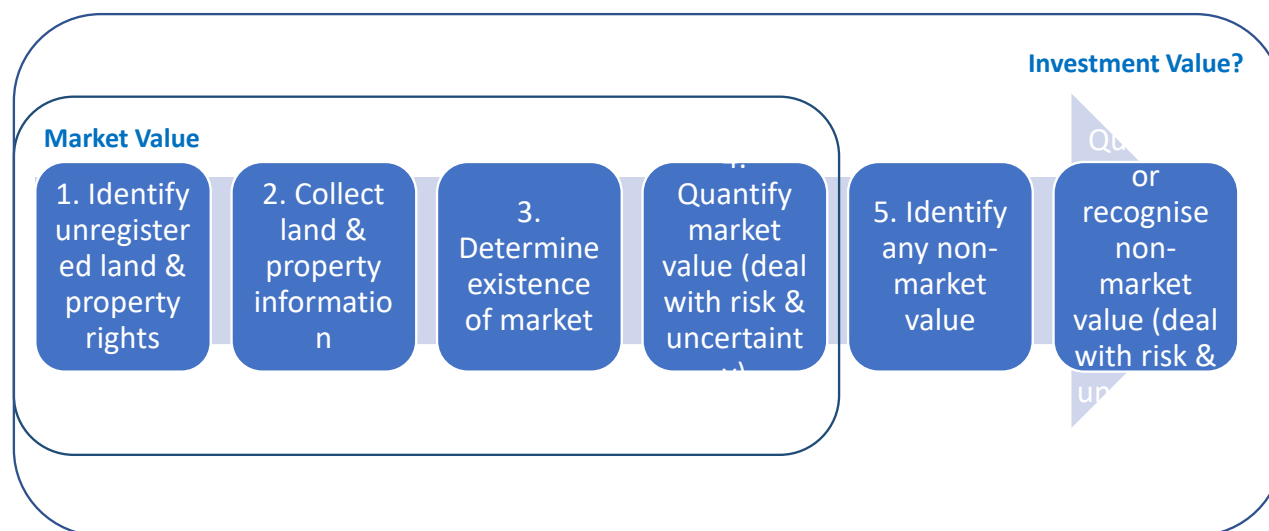
- A community obtains benefits from legitimising their land, including the right to fish, raise wild foods, fuel wood, timber and thatching
- These rights allow collection of products that often generate additional income by selling
- Rights that generate sales can be valued using the income approach. Rights that generate income can be valued using the income approach
- It may also be possible to estimate the value of benefits consumed ‘internally’ within the community
- The value of some benefits, though, can be estimated using other approaches. For example, some produce, honey, etc. are traded in a market, so there is no price evidence



# Manual for the Valuation of Unregistered Land

What issues arise when valuers seek to provide accessible, affordable, competent, objective, defensible valuations of unregistered land?

The evolving nature of understanding on 'non-market' value ...

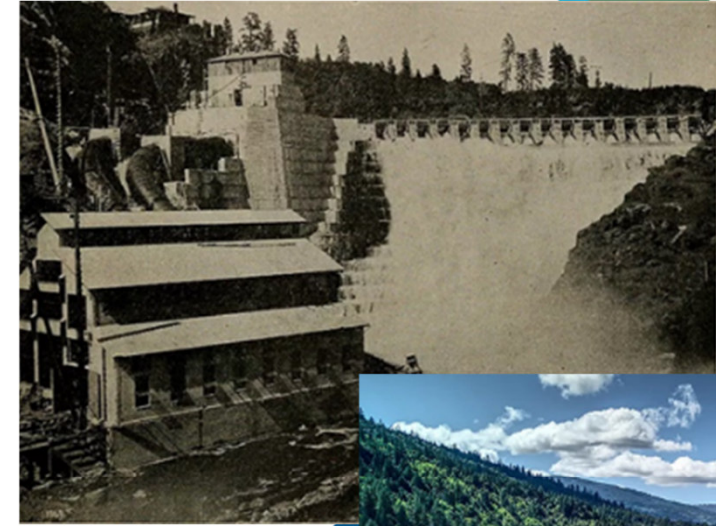


Valuation: Standards, Skills, Capacity, Information and IT...



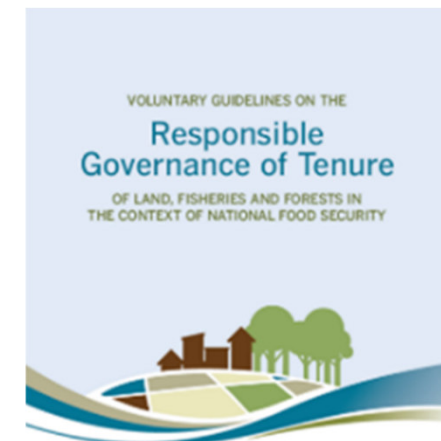
## Klamath River – removal of hydroelectric dams

- Retrospective acknowledgement of environmental and cultural value
- 1912 – 6 dams built against agreements with native American tribes
- Oregon/N California Pacific seaboard
- Initial basis of value – overwhelmingly economic (and of value to one societal group) – colonial mentality
- Return of Chinook Salmon for first time in 100 years
- Dam Removal Europe has supported more than 8,000 dismantlings, while American Rivers estimates that about 2,100 dams have been removed in the US since 1912.
- The Klamath River drains over 12,000 square miles from its headwaters in Oregon's high desert through mountain ranges before emerging into temperate rainforest along the California coast. The Yurok, Karuk and Hoopa Valley tribes, Shasta Indian Nation, and the Klamath Tribes confederation all live in the Klamath Basin and historically have sustained themselves on what was once the country's third-largest salmon bearing river.



# Acquisition and compensation

- ▶ The Principle of Equivalence is recognized in many International laws that compensating for market value alone is not enough to satisfy the Principle of Equivalence. The principle of equivalence stipulates that individuals who have their property taken should not be in a worse position after the taking than they were before.
- ▶ Different forms of compensation for land acquisition, include:
  - Special value to the owner
  - Costs for the disturbance involved in the taking
  - Injurious affection or severance reducing the value of any land not taken
  - Allowance called “solatium”:
    - provided as a solace for intangible losses
    - not reducible to monetary terms
    - monetary compensation is the best that can be done at the tim



# LSLA and transparency

## Global land rush 2.0

### THIS BEAUTIFUL LAND: CORRUPTION, DISCRIMINATION AND LAND RIGHTS IN SUB-SAHARAN AFRICA

Our new report explores the links between discrimination and corruption in the land sector



[This beautiful land: Corruption, discrimination... - Transparency.org](#)

- ▶ A 2021 report on large-scale land acquisitions, for example, revealed that many developed countries disclose only limited data and are failing on transparency. In G20 countries, less than 20 per cent of deals disclose the operating company, only 15 per cent reveal the land's exact location, and less than **10 per cent share financial details like purchase price (valuation) or leasing fees**. This lack of transparency can facilitate corruption and lead to the dispossession of those who rely on the land for their survival.



## RICS – Impact of carbon markets on the rural economy

- Building on previous research in a quickly evolving sector [Impact of carbon markets on the rural economy, 1st edition, practice information – UK](#) - a new vocabulary for surveyors and valuers
- Complexities and challenges of incorporating soil carbon sequestration projects (SCSPs) into property valuations and the wider surveying industry
- Carbon compliance market (CCM) & Voluntary carbon market (VCM)
- [Article 6 of the Paris Agreement | UNFCCC](#) & [ISO 14064-1:2018 - Greenhouse gases](#)
- two primary **valuation** perspectives: viewing the interest in the land as a real property asset as defined by IVS 400, or as a financial instrument as outlined in IVS 500
- Valuation factors - Carbon credit revenue potential, Regulatory compliance and certification, Project duration and permanence, Risk and insurance considerations, ***Ownership and contractual obligations: The impact of ownership structures and any binding agreements on the land's use and revenue***





## Delta Blue Carbon - Pakistan

- Delta Blue Carbon, Delta Blue Carbon – Mangrove Restoration In Sindh – Delta Blue Carbon – Mangrove Restoration In Sindh which aimed to sequester carbon by restoring 350,000 hectares of tidal wetlands in Pakistan.
- Despite 60% of piecemeal bids exceeding £47.30 (\$60 USD), Delta Blue Carbon sold all 50,000 available **carbon credits** to a single purchaser for a final price of £23.43 (\$29.72 USD). This final price is three times higher than that of similar projects based on land. The premium reflects the significant **environmental, biodiversity and social value** provided by the project in addition to the sequestered carbon.



## Australia

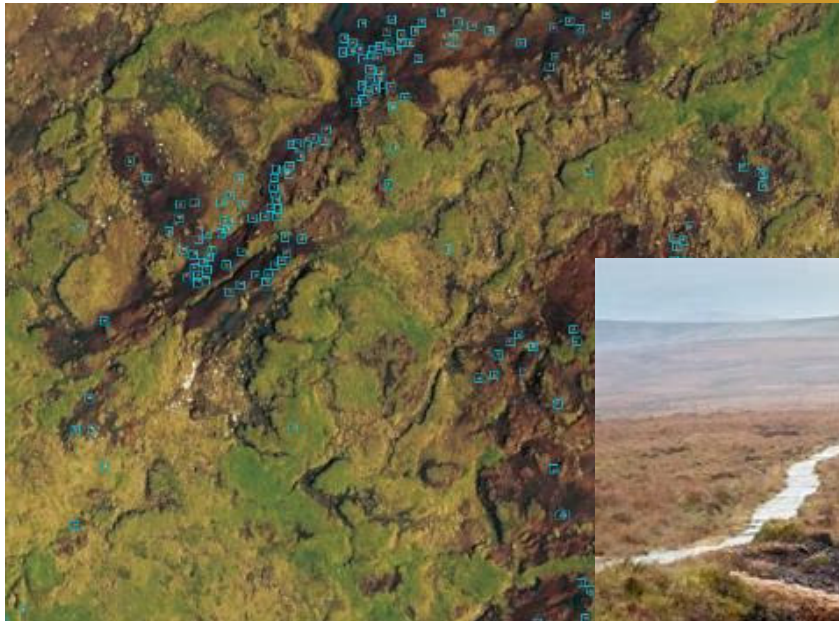
- A landmark transaction for Australia's agriculture sector and the domestic carbon market, Commonwealth Bank of Australia has prepaid for a portion of the **carbon credits** that will be generated by a carbon credit project in Western Australia.
- This \$1.7 million transaction supports [Forever Wild](#), an ecological and social enterprise, and [Corporate Carbon](#), a carbon project service provider, **to acquire and manage pastoral leases** for cattle stations at Narndee Station and Mount Magnet in Western Australia, along with an associated carbon credit project. Under the financing structure terms, the bank has **prepaid** for Australian Carbon Credit Units (ACCUs) that will be delivered over a five-year period.





## EOLAS – AI, Geospatial, GIS and Natural Capital/Carbon evaluation

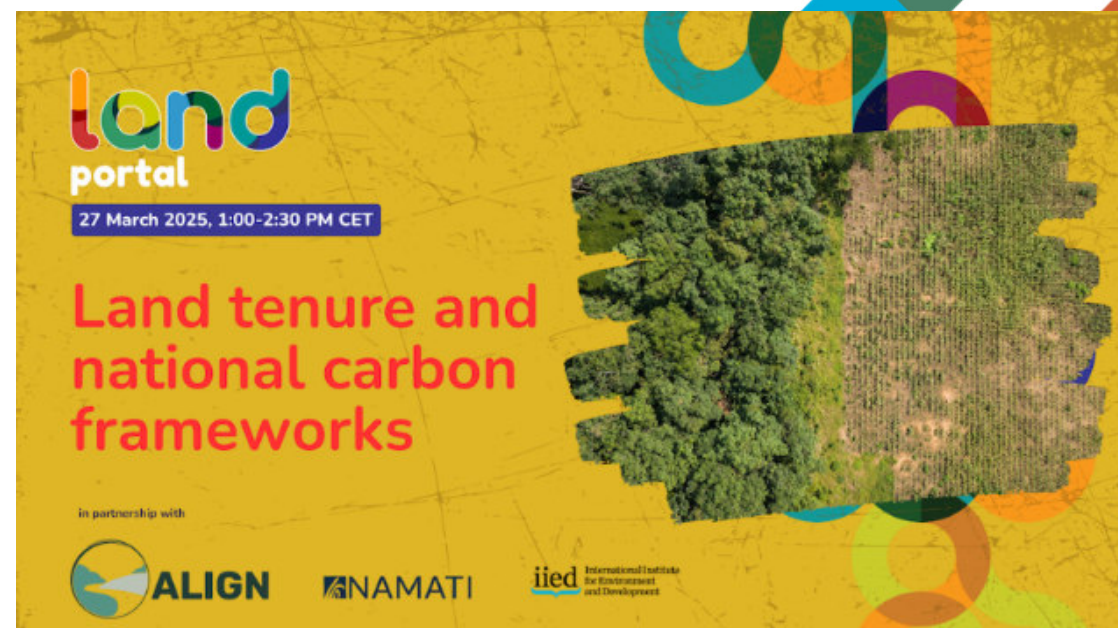
- Geospatial expertise combined with ecology, land management and valuation Landscape-scale approach aims to boost natural capital | Journals | RICS
- Deer census – Scottish Highlands (population control, rewilding)
- Natural capital – peatland restoration, woodland management, water course resilience – using Geospatial data analysis





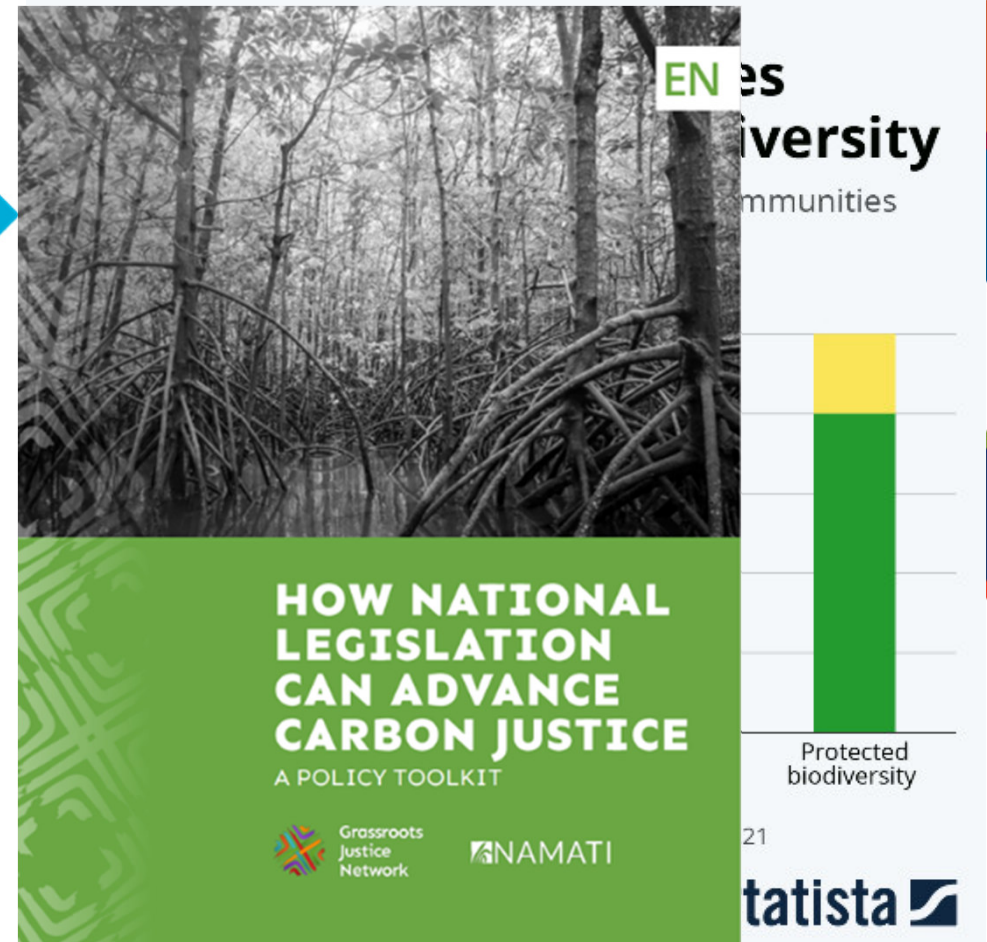
## Land Tenure/Rights and Carbon Trading

- Growing understanding of the potential effects of carbon trading on land rights
- 3 important recent publications and online events Land tenure and national carbon frameworks | Land Portal
- Advancing Land-based Investment Governance (ALIGN) webinar series | Land Portal
- Underlining role of local knowledge, transparency, data driven decisions, fair compensation, the role of the ‘cadastre’, tenure security and :
- Free, Prior and Informed Consent (FPIC)



## Land Tenure/Rights and Carbon Trading

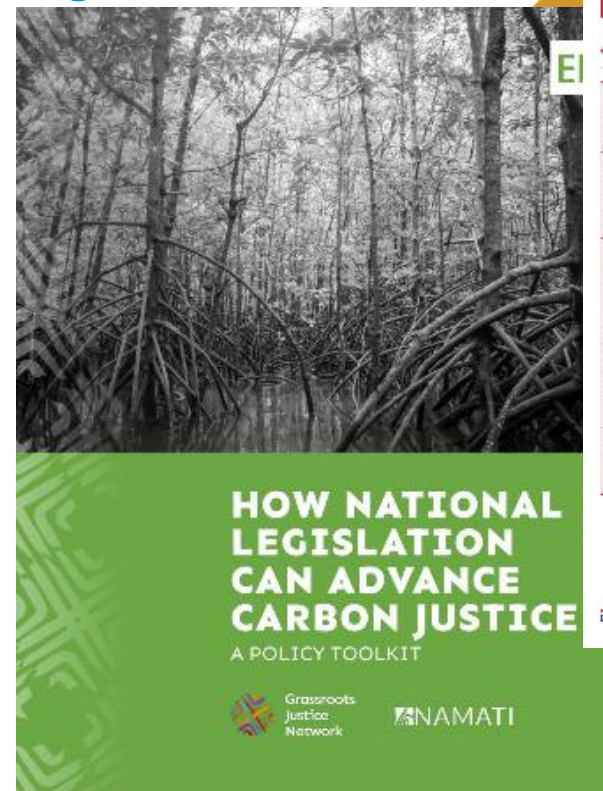
- **Respect community rights to land and water.** Land tenure rights must be identified and recognized before beginning project development. Communities can negotiate directly with carbon project developers to arrive at a fair and binding agreement.
- **Free, Prior and Informed Consent** – including the right to say no. The responsible government agency maintains a national registry of project documents and approval conditions that is publicly accessible
- **Fair Compensation**
- **Fair Participation**
- **Enforcement**
- No way to Pollute - Carbon payments must not be a substitute for eliminating avoidable emissions. Fossil fuel companies should be barred from taking part in carbon payment schemes.





## Land Tenure/Rights and Carbon Trading

- Namati [How National Legislation Can Advance Carbon Justice: A Policy Toolkit](#)
- Nature-based climate solutions (NbS) [Policy-Brief Carbon-Rights-EN.pdf](#)
- [Tackling the complexities of biosequestered carbon rights](#)





## Conclusions

- Nature-based climate solutions (NbS) and carbon trading are fundamentally changing land value, land management and tenure rights – in the global north and critically in the global south
- Surveyors and valuers need to learn a new language and engage
- The 'Cadastre' has an essential role to play and needs to upgrade (LADM ?)
- The Volunteer Surveyors Network also has a vital role to play for the next generation of land professionals and geospatial experts
- In leading this emerging sector conversation surveyors can place themselves at the forefront of the fight to alleviate Climate Change and Biodiversity degradation
- Time to be bold ...

## The most relevant SDGs related to the presentation and theme of this session



**SUSTAINABLE DEVELOPMENT GOALS**

International Federation of Surveyors supports the Sustainable Development Goals



**WORKING  
WEEK 2025**

AND

**Locate25** | **G**  
THE NATIONAL GEOSPATIAL CONFERENCE

Collaboration, Innovation and Resilience:  
Championing a Digital Generation



**Geospatial**  
Council of Australia

Brisbane, Australia 6–10 April

**1** NO POVERTY



**2** ZERO HUNGER



**3** GOOD HEALTH AND WELL-BEING



**4** QUALITY EDUCATION



**5** GENDER EQUALITY



**6** CLEAN WATER AND SANITATION



**7** AFFORDABLE AND CLEAN ENERGY



**8** DECENT WORK AND ECONOMIC GROWTH



**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE



**10** REDUCED INEQUALITIES



**11** SUSTAINABLE CITIES AND COMMUNITIES



**12** RESPONSIBLE CONSUMPTION AND PRODUCTION



**13** CLIMATE ACTION



**14** LIFE BELOW WATER



**15** LIFE ON LAND



**16** PEACE, JUSTICE AND STRONG INSTITUTIONS



**17** PARTNERSHIPS FOR THE GOALS



ORGANISED BY



**Geospatial**  
Council of Australia

PLATINUM SPONSORS



Australian Government

CHCN AV



THE SCIENCE OF WHERE™

**Leica**  
Geosystems

