# Discussion, "Implications of lifting the open-pit mining ban"

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### Principles for enabling sustainability of income from mining especially open pit mining

- Mining is not sustainable activity, but income from mining could be sustainable under certain conditions.
- ESG principles should be practiced by miners, the regulators, and the local, host communities
- Mining investments need to anticipate various risks and practice adaptive management

#### Sustainable income from mining

Rents from mining should be invested in assets that would assure continuing production for livelihood and the economy.

- The study shows various economic benefits and earnings by the mining region (GRDP, GVA), NG (taxes) and LGUs (sources of local revenues; SDMP; index of benefits by municipality class)
  - But where these earnings are invested is not examined in detail except for examples of good performing mining companies that have adequate rehabilitation and social development activities (Slide 22).
- LGU share from natural wealth should be allocated for both current and renewable capital expenditures. Not true expenditures are mostly current expenditures (Slide 21)
- Investments in other assets that are reproducible or renewable is key to making mining income sustainable human capital, renewable natural capital, biodiverse landscapes/seascapes, social capital. Examples in Slide 9 and 23 DTI-CMCI are noteworthy).
- Missing information on local household impacts and IP Royalties. MICC Review showed increase in average incomes and decrease in income inequality in most host towns and regions. But the values are still below national poverty threshold and still inequitable.

## Mining activities should be undertaken with environmental and social safeguards

Considerable discussion on environmental and social issues throughout the paper is much appreciated and provides a balanced treatise. But more recommendations are needed.

- In particular, for as long as the feasibility studies and the EIAs do not account for the environmental and social costs data on these will not be generated systematically.
  - Social benefit cost analysis should be implemented for EIAs.
  - > Economic analysis, and not only Financial analysis should be part of the DMFP.
- The paper appears to balk on this because of lack of standards. Indeed, for as long as they are required, data will not be generated at the level of ecosystems' impacts.
- But reforming the EIA and the feasibility studies are important for numerous settings. These
  would enable formulating standards that are based on several situations and not a single
  case study.

## Mining activities should be undertaken with environmental and social safeguards.

- The ability of analysts to do both this will accelerate soon because:
  - There are latent skills in the 60 members of the Environment and Economy Group of the Resources, Environment and Economics Association of the Philippines.
  - These are being replicated and users are oriented to their relevance in decisionmaking through PCARRD training and specific DENR Projects.
- Economic valuation of natural capital and ecosystem services are now part of the country's roadmap on Natural Capital Accounting
  - There are currently senate and house drafts for the Philippine Environmental and Natural Capital Accounts that under discussion.
    - Seeks to support the ongoing implementation of the recently approved NCA Roadmap
    - Adds non-economic indicators, or nature's values
    - Links the NCA statistical system with the EIA as prime user, at various levels (sector, policy, ecosystem [programmatic EIA].

## Mining activities should be undertaken with environmental and social safeguards

- Economic valuation includes natural capital depreciation, valuation of pollution damage, valuation of non-marketed benefits (e.g., carbon values, existence values). These are key inputs to BCA, EIRR, and Genuine Savings measures.
  - Beyond economic valuation, the use of agreed upon indicators of nature are also in the proposed PENCAS specially on invaluable, significant, impacts (culture, species, and the like). These are embodied in the recent IPBES (2022) on Nature's Values.
  - The NCA Roadmap and PENCAS would enable operationalizing the concerns on biodiversity protection and conservation the subject of the recently passed DAO.
- Raising the bar on metrics for mining activities is a must to anticipate untoward impacts
  of open-pit mining and allow for both precautionary, corrective and adaptive
  mechanisms to be undertaken.
- ESG is needed (environmental, social and governance principles and accountability)

ESG by all economic agents in mining: miners, the regulators, and local, host community. What are their tools?

	Miners	Regulators	Host Communities
Environment	Biodiversity, ecosystem services, water management, mine waste / tailings, air, noise, energy, climate change (carbon footprint, greenhouse gas), hazardous substances, mine closure. Incorporate into feasibility studies and EIA	PENCAS/NCA Revise the EIA system; compute Genuine Savings at national and regional levels	Citizen monitoring with SUC and NGO partners
Social	Human rights, land use, resettlement, vulnerable people, gender, labor practices, worker/community health & safety, security, artisanal miners, mine closure / after use	Internationally accepted indicators (e.g., Human Development Index)	EITI indicators. Community scorecard with SUC and NGO partners
Governance	Legal compliance, ethics, anti-bribery and corruption (ABC), transparency, legal compliance, ethics, anti-bribery and corruption (ABC), transparency.	Governance indicators. Cross-sectoral scoring.	Community scorecard. with SUC and NGO partners

#### Rehabilitation of the mined area should be undertaken ASAP

- Restore ecosystem services (and not the original landscape which is impossible as the study noted) for subsequent land-uses that are anticipated at the immediate zone of impact and landscape-seascape wide).
  - The use of a reference is insufficient in scope. Some examples of a broader approach where biodiversity concerns should be in prospective, new investments:
    - Products of trees and fruit crop and annual crop products
    - Sustainable urban centers with adequate water and energy sources
    - Water based services and aquatic resources-based production
    - Biodiversity-rich areas with high conservation values. Mining now has a DAO 2022-04 on biodiversity mainstreaming in mining,
- The few responsible, open pit-mining companies have shown successful rehabilitation to be feasible (RTNMC, Semirara MPC), but the actual monitoring is insufficient. Again, NCA and PENCAS would enable this and areas with open-pit mining should be prioritized in these systems.

#### Mining companies need to anticipate various risks and practice adaptive management

- Economic and market risks
  - > Deep pockets are needed. Capitalization requirements for open pit mining
- Social and political risk multistakeholder engagement now a must. Enclaves are no longer relevant. Slide 15: drop in specific firms' values.

#### • Environmental and Climate risk

- Marinduque mining incident took 30 years to compensate a few and at less than the earlier estimated impact on livelihood
- LGU not yet compensated for damage to infrastructure and facilities.
- The Environmental Guarantee Fund is outdated and inadequate. Revise specially with respect to open pit mining.
- Continuous collaboration among the stakeholders is key to addressing these risks by adaptive management. Note how select mining companies used SDMPs for covid help despite no earnings from exports.