

# Minerals Account: Frequently Asked Questions



## What is a Minerals Account?

Mineral resources are naturally occurring inorganic substances which are generally found underneath the earth's surface. Non-metallic and metallic mineral deposits are considered non-renewable because of the hundreds — if not thousands of years — they take to regenerate.

A minerals account facilitates analysis of existing physical and monetary stocks of mineral resources during a specific period. It covers the changes that affect mineral stocks.

The Philippine Statistics Authority (PSA), together with the Department of Environment and Natural Resources - Mines and Geosciences Bureau (DENR-MGB) developed the physical and monetary minerals asset accounts for gold, copper, nickel, and chromium.

In developing natural capital accounts for the Philippines, priority was given to minerals owing to a strong demand from the Philippines' National Economic and Development Authority (NEDA), Department of Environment and Natural Resources, and Climate Change Commission (CCC) for tools and indicators of responsible management of mineral resources and abate the adverse impacts of climate change in mineral areas. Section 15 of Executive Order 79, which seeks to institutionalize and reform the Philippine mining sector, refers to Wealth Accounting and the Valuation of Ecosystem Services (WAVES) as the tool for conducting natural resource accounting and cost-benefit analyses.

WAVES is a World Bank-led global partnership that seeks to promote sustainable development by ensuring that natural resources are mainstreamed into national accounts and development planning.



## Why is it important to develop a Minerals Account?

Minerals are a major resource in the Philippines. In fact, the Philippines ranks fifth globally in mineral reserves. It ranks third in gold deposits, fourth in copper, fifth in nickel, and sixth in chromite.

In 2010, the country's total metallic mineral reserves were assessed at 14.5 billion metric tons while its non-metallic mineral reserves were estimated to be 67.66 billion metric tons. The country's mineral reserves are valued at US\$ 1.387 trillion.



An estimated 30% of the total land area of the country (or 9 million hectares) is found to be geologically prospective for metallic minerals with the top three minerals found in abundance in Mindanao and the province of Palawan in Luzon.

Mindanao:     70% gold reserves  
                    62% copper reserves

Palawan:        53% nickel reserves

Luzon, the biggest island in the Philippines, has the bulk of zinc and chromite reserves.

Because minerals are such a rich source of natural wealth, there is a need to account for them and plan for their responsible use.

In 2001, the mining of metallic and non-metallic resources contributed 0.58% to the country's GDP. By 2012, this number has grown to 1.14%. But compared to the other industries, mining contributes a relatively small percentage to the Philippine economy.

Nonetheless, the mining industry plays an important role in the country's economic development by generating employment opportunities, contributing to the country's foreign-exchange earnings through exports, and providing additional revenues for the government through taxes and fees.

The minerals account can inform the long, drawn-out debate on mining in the Philippines as it is constructed, updated, and refined at the national level. This will allow the government to determine whether resource rents have been reinvested and to compare mineral rents with environmental degradation based on different market conditions, investment incentives, and governance structures. Developing such an account also includes an evaluation of revenue allocation between national and local governments and benefits-sharing with local communities and indigenous peoples.

The setting up of an asset account for minerals is thus crucial because of the exhaustibility of these resources and the need to balance the needs of economic development against environmental sustainability. Such an account can yield indicators of sustainability, such as the level of resources, the extraction rate, and the expected life of the assets. These indicators can serve as a guide in policy formulation and relevant legislation.

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**What were the mineral accounts produced and which agencies/ organizations were involved in putting them together?**

The PSA, the government's lead agency in the production and analysis of statistical data, led the development of the minerals account, working closely with the DENR-MGB, the bureau tasked with the administration and disposition of mineral lands and resources and the drafting of rules and regulations, policies and programs relating to mineral resource management and geosciences developments.

The data used in the estimation of the mineral accounts were derived mostly from the accomplished administrative forms of the MGB. These included reports such as the Declaration of Mining Project Feasibility, a regulatory requirement that includes plans, documents, and other certification in order to obtain approval from the government for the development of a mining area; the Annual Mineral Resource/Reserve Inventory reports, which contain data on production, reappraisals (i.e., changes in mineral grade, and recovery rates), classification of reserves and status of mining operations; and administrative issuances among others.

**Have the findings on mineral accounts or minerals in the Philippines ever been applied in a certain area?**

Yes, for the highly mineralized area of Southern Palawan, an ecosystem account focusing on minerals was developed to assess different resource-use scenarios and to contribute to local medium- and long-term development planning and sustainable management.

In Palawan, mining is not allowed in environmentally critical and sensitive areas which have been declared as Core and Restricted Zones under the nationally-legislated Strategic Environmental Plan for Palawan Act, and is often in direct conflict with existing or proposed areas, as well as ancestral domains. A comprehensive investigation taking into account the biodiversity of Palawan, its economic potential from different agricultural activities like oil palm cultivation was done in close coordination with the PSA to ensure that the information can be cultivated into national mineral accounts.

**How can data generated from minerals account help the government achieve sustainable development?**

The compilation of the mineral asset accounts will facilitate the development of macroeconomic indicators for computing adjusted net national income, adjusted net national savings, and comprehensive wealth.

Likewise, the information derived from the accounts are expected to inform development planning and policy analysis and formulation at NEDA, Department of Budget and Management, Department of Finance, DENR and other relevant national government agencies.

