



# TECHNICAL ASSISTANCE REPORT

## MONGOLIA

Report on National Accounts Mission  
(July 21–25, 2025)

**OCTOBER 2025**

**PREPARED BY**

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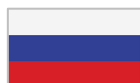
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# Abbreviations and Acronyms

CCAMTAC	Caucasus, Central Asia, and Mongolia Regional Capacity Development Center
NSO	National Statistical Office of Mongolia
GDP-P	GDP by Production
GDP-E	GDP by Expenditure
GFCF	Gross Fixed Capital Formation
ISIC Rev.4	International Standard Industrial Classification of All Economic Activities, Revision 4
SUT	Supply and Use Table
TA	Technical Assistance

# Summary of Mission Outcomes and Priority Recommendations

1. **A technical assistance (TA) mission of the Caucasus, Central Asia, and Mongolia Regional Capacity Development Center (CCAMTAC) visited Ulaanbaatar during July 21–25, 2025.** The mission assisted the National Statistical Office of Mongolia (NSO) in improving methods for the compilation of national accounts.
2. **The NSO compiles GDP at constant prices with the fixed base year 2015, which should be updated.** However, the NSO is also considering the possibility of moving from fixed base to chain-linked volume estimation. Following October 2024 CCAMTAC TA mission's recommendations the NSO compiled experimental chain-linked time series of quarterly GDP by production (GDP-P).
3. **The results were compared with currently published data.** Significant differences were revealed, which can be explained by changes in the structure of the economy in recent years. Currently, quarterly GDP-P is compiled at the two-digit level of International Standard Industrial Classification of All Economic Activities (ISIC Rev.4). The mission noted that the chain-linked time series of GDP-P should be compiled according to the structure of the supply and use tables (SUT) and should include as many types of economic activity and products as possible. The NSO compiles the SUT every five years. The last SUT is available for 2019.
4. **The NSO also compiles the chain-linked time series of quarterly GDP by expenditure (GDP-E).** At this stage the discrepancies between GDP-P and GDP-E are significant. The mission recommended that the NSO compiles the SUT for 2024. The 2024 SUT can be used for reconciliation of GDP-P and GDP-E estimates, which will improve the overall quality of chain-linked time series. After that the NSO may consider publishing the chain-linked time series instead of the currently published results with the fixed base year 2015.
5. **To support the development of national accounts, the mission recommended a detailed action plan with the following priority recommendations:**

# Recommendations

Target Date	Priority Recommendation*	Responsible Institution
February 2026	<i>Compile output of coal by its detailed types.</i>	NSO
February 2026	<i>Compile coal balance at current prices.</i>	NSO
October 2026	<i>Reconcile the quarterly real GDP-P and GDP-E estimates.</i>	NSO

\* Further details on the priority recommendations and the related actions/milestones can be found in the action plan under Detailed Technical Assessment and Recommendations.

# Detailed Technical Assessment and Recommendations

Priority	Action / Milestone	Target Completion Date	Status of Implementation as of September 2025
<b>Outcome: Annual and quarterly national accounts are compiled in accordance with best international practice</b>			
H	Prioritize the compilation of chain-linked GDP series.	January 2025	Completed
H	Increase staff resources in the national accounts division by adding new staff and improving qualification of existing staff via training courses and workshops.	January 2025	Ongoing
H	Compile GFCF by non-residential buildings and other structures as an aggregate.	March 2025	Completed
M	Publish reconciled estimates of GDP-P and GDP-E and statistical discrepancies with the fixed base year 2015.	March 2025	Ongoing
H	Compile quarterly GDP according to ISIC Rev. 4 sections.	March 2025	Completed
H	Assess the level of detail of existing data sources to determine how many activities can be included in the compilation of chain-linked time series.	April 2025	Completed
H	Compile chained-linked GDP-P series by using the annual overlap technique.	June 2025	Completed
H	Compile chain-linked GDP-E series by using the annual overlap technique.	September 2025	Completed
H	Reconcile the chain-linked time series of GDP-P and GDP-E and analyze the overall level of statistical discrepancies.	October 2025	Ongoing
H	Compile the 2024 SUT at current prices.	November 2025	Ongoing
H	Compile output of coal by its detailed types.	February 2026	Ongoing
H	Compile coal balance at current prices.	February 2026	Ongoing
H	Compile gross value added of coal at a detailed level.	June 2026	Ongoing
H	Ensure the balance of quarterly coal production and export.	June 2026	Ongoing



H	Reconcile the quarterly real GDP-P and GDP-E estimates.	October 2026	Ongoing
H	Publish the chain-linked time series of GDP-P when the chain-linked time series of GDP-E is compiled and full consistency between these two methods is achieved.	November 2026	Ongoing

H – High; M – Medium

## A. QUARTERLY GDP BY PRODUCTION

### Chain-linked Time Series of Quarterly GDP

**6. Following the September 2024 CCAMTAC TA mission’s recommendation, the NSO National Accounts Department (NAD) compiled chain-linked time series of quarterly GDP by using the annual overlay technique.** At this stage, the annual overlap technique is fully implemented in the quarterly GDP chain-link series, which ensures consistency of the annual and quarterly national accounts.

**7. Quarterly chain-link series of GDP-P are compiled according to the ISIC Rev.4 sections for both the 2015 and 2019 base years.** The choice of base year does not affect the annual growth rates of real GDP. The mission noted that in general it is better to have the more recent base year, however, since chain-linked time series are being implemented for the first time, for analytical purposes the 2015 base year is more convenient.

**8. The mission analysed the changes resulting from the implementation of chain-linked time series.** The cumulative growth of real GDP in 2015-2024 amounted to 39.2 percent, which is 0.7 percentage points lower than the result of the 2015 fixed base year (39.9 percent). However, this difference is insignificant for a developing country and almost repeats the changes that occurred in some developed economies when chain-linked series were implemented. At the same time, taking into account that the base year 2015 was already outdated, this change can be perceived as a very good result.

**9. Despite the stability of cumulative growth in 2015-2024, annual real GDP growth rates vary significantly from year to year.** Table 1 shows the annual real GDP growth rates for the fixed base and chain-linked time series.

**Table 1. Growth Rates of Real GDP at the Section Level of ISIC Rev.4, y-o-y, percent**

	2016	2017	2018	2019	2020	2021	2022	2023	2024
GDP, 2015 fixed base year	1.5	5.6	7.7	5.6	-4.6	1.6	5.0	7.4	4.9
GDP, chain-linked	1.5	5.5	7.6	4.8	-5.2	1.6	2.5	9.8	6.2
Difference in percentage points	0.0	-0.1	-0.1	-0.8	-0.6	0.0	-2.5	2.4	1.3

Source: NSO.

The largest change is observed in 2023, when the real GDP growth rate increased by 2.4 percentage points to 9.8 percent instead of 7.4 percent. This was mainly due to the sharp growth of the mining industry in 2022 and 2023. In particular, the weight of coal mining in 2022 is much higher than in 2015, and its sharp growth has led to a significant upward revision of real GDP. This effect is especially noticeable when calculating at the three-digit level of the ISIC Rev.2, where coal mining is separated from the mining industry

## Chain-linked Time Series of GDP at the Three-digit Level of ISIC Rev. 4

**10. The NSO also compiled chain-linked GDP series with the 2019 reference year at the three-digit level of ISIC Rev.4, where the discrepancies are much larger.** Table 3 shows the differences between the currently published real GDP growth rates and the new data compiled at the three-digit level.

**Table 2. Growth Rates of Real GDP at the Three-digit Level of ISIC Rev.4, y-o-y, percent**

	2020	2021	2022	2023	2024
GDP, 2015 fixed base year	-4.6	1.6	5.0	7.4	4.9
GDP, chain-linked	-4.5	0.1	3.4	11.5	5.5
Difference in percentage points	0.1	-1.5	-1.6	4.1	0.6

Source: NSO.

Table 2 shows that in 2021 and 2022, GDP decreases more than in the data compiled at the section level, while in 2023, on the contrary, it increases significantly and exceeds the indicator compiled based on the 2015 fixed base year by 4.1 percentage points. Such an increase is mainly because of coal mining. In 2019–2024, the cumulative growth of real GDP amounted to 16.3 percent, which is 1.6 percentage points higher than the result of the 2015 fixed base year (14.7 percent).

**11. After reviewing these experimental results, the mission and the NSO staff met with the NSO Director to discuss the action plan for the implementation and publication of chain-linked series.** During the meeting, two different chain-linked GDP series were presented, and discussions were held about which one would be more appropriate to publish.

**12. The mission noted that when implementing chain-linked series, it is important to make calculations at the most detailed level possible, subject to availability of source data.** However, in this case, the chain-linked time series compiled at the three-digit level of the ISIC Rev.2 gives much larger discrepancies than the data produced at the section level. This indicates that the detailed data and their compilation methods may contain significant shortcomings. At the same time, the compilation of chain-linked time series of GDP-E is not yet complete.

**13. In the given circumstances, the mission recommended that the NSO continues its work in two directions before publishing the data:**

- Further improvement of the compilation of coal mining, as a key sector of the country's economy.
- Compilation of chain-linked series of GDP-E and their reconciliation with GDP-P.

After the completion of the work in these two directions, the NSO may publish chain-linked time series of GDP.

## Coal Mining

**14. Coal mining is very important to the Mongolian economy, and its accurate accounting is a primary task of the NSO.** The volume of mined coal affects not only the mining industry but also related services, such as transport and storage.

**15. The NSO produces an energy balance that shows coal production and its use by category.** Table 3 shows the energy balance of coal.

**Table 3. Balance of Coal, tons**

	2019	2020	2021	2022	2023	2024
<b>Resources- Total</b>	64,763.6	56,791.2	47,691.2	54,630.1	94,476.9	110,758.0
Stock at the beginning of the year	8,910.3	12,941.9	13,990.4	17,309.4	9,191.7	7,347.4
Produced	55,799.4	43,844.8	33,691.8	37,294.7	85,262.3	103,401.3
State owned mining company	21,453.2	18,825.4	15,233.7	18,151.1	35,546.8	38,261.9
Private sectors mining company	34,346.2	25,019.4	18,458.2	19,143.6	49,715.5	65,139.5
Imports	53.9	4.5	9.0	26.1	22.8	9.3
<b>Consumption-Total</b>	9,792.3	8,757.7	9,914.7	10,378.5	10,943.8	11,840.7
Consumed by thermal power stations	7,726.7	7,423.4	8,350.6	8,859.6	9,398.3	9,951.2
Distributed to establishments and households for fuel purposes	2,065.6	1,334.4	1,564.1	1,519.0	1,545.5	1,889.5
Industry & construction	176.0	140.7	133.5	154.8	145.2	170.5
Transport & communication	56.0	25.6	17.0	16.0	19.4	6.6
Agriculture, forestry and fishing, hunting	4.1	4.8	2.3	1.9	2.3	1.5
Communal housing	541.0	532.1	567.5	526.1	551.8	556.7
of which: household	538.5	530.7	567.4	526.1	551.8	556.7
Other	1,288.5	631.2	843.8	820.2	826.8	1,154.2
Processing industries	9,039.1	8,528.1	4,897.1	6,725.3	13,939.1	7,818.1
<b>Export</b>	32328.9	25150.2	15055.4	28192.9	61714.5	76939.4
Losses during transportation and storage	661.4	364.8	514.7	141.7	532.1	521.6
Stock at the end of the year	12,941.9	13,990.4	17,309.4	9,191.7	7,347.4	13,638.1

Source: NSO.

Table 3 shows that coal production increased sharply in 2023, which was largely offset by increased exports. The mission noted that it would be good if a similar balance were achieved at current prices, as coal pricing is very important and has a significant impact on nominal and real GDP. Intermediate consumption of coal by domestic enterprises also increased sharply in 2023

**16. Given the important contribution of coal to the Mongolian economy, it would be better to classify it by detailed categories.** Extracted coal varies significantly in quality, and these differences directly affect its market price. The key factors that determine coal quality are as follows:

- **Calorific value (energy content)** - High-quality coal has a higher calorific value, meaning it produces more energy per unit when burned. This makes it more efficient and desirable for power generation and industrial use.
- **Moisture content** - Coal with high moisture content is less efficient and harder to handle. It can freeze during transportation or even spontaneously combust. Lower moisture coal is preferred and priced higher.
- **Ash content** - Ash is the residue after combustion. High ash coal reduces efficiency and increases disposal costs. Low ash coal is cleaner and more valuable.
- **Sulfur content** - Sulfur emissions contribute to air pollution and acid rain. Environmental regulations favor low-sulfur coal, which is more environmentally friendly and commands a premium price.
- **Trace elements** - Elements such as mercury and arsenic can pose health and environmental risks. Coal with fewer harmful trace elements is more marketable.

17. Table 4 shows the main types of coal, divided according to their quality characteristics.

**Table 4. Types of Coal and Their Uses**

Coal type	Rank	Common use	Market value
Lignite	Low	Local power generation	Low
Sub-bituminous	Medium	Power generation	Moderate
Bituminous	High	Power and industrial use	High
Anthracite	Very high	Steelmaking, premium fuel	Very High

The classification given in Table 4 corresponds to the six-digit level of the Harmonized Classification (HS). Accordingly, it is possible to divide coal exports and imports according to them. It is also important that coal mining enterprises present the volumes and prices of coal mined according to this classification in the annual survey.

18. **At this stage, coal prices differ sharply in different sources, which makes it difficult to compile a balance of coal at current prices.** Coal prices are recorded at its mining enterprises, in Mongolian exports, in Chinese imports (the main importer of Mongolian coal), and in the global market. Different prices are recorded in all four data sources, which is due to transportation and different mechanisms of market demand and supply. However, the differences are recorded not only in prices but also in price dynamics. For example, if the price of coal in the global market has doubled, it would be logical to assume that the price of coal in local data sources will also increase by about two times. Nevertheless, different data sources show different dynamics of coal prices. The mission and NSO staff agreed that in September 2025, CCAMTAC will conduct a price statistics mission that will, among other things, examine coal price formation issues.

#### Recommended actions:

- Compile output of coal by its detailed types.
- Compile coal balance at current prices.
- Compile gross value added of coal at a detailed level.
- Publish the chain-linked time series of GDP-P when the chain-linked time series of GDP-E is compiled and full consistency between these two methods is achieved.

## B. GDP BY EXPENDITURE

19. **The NSO has compiled the latest Supply and Use Tables (SUT) based on 2019 data.** The SUT provides a balance between GDP-P and GDP-E. In the officially published estimates up to 2019, GDP-P and GDP-E are equal. However, significant discrepancies begin from 2020, as these two methods are based on different data sources and it is difficult to achieve the balance of supply and use by product in absence of the SUT framework.

20. **Table 5 shows the discrepancies between GDP-P and GDP-E at current prices.**

**Table 5. Nominal GDP by Production and Expenditure, mil. MNT**

	2019	2020	2021	2022	2023	2024
GDP-P	37839225.4	37453275.3	43555484.4	53851544.5	70441515.8	79956293.3
GDP-E	37839225.4	37883041.7	44702733.3	54877815.6	71201583.5	80048800.5
Difference, %	0.0	-1.1	-2.6	-1.9	-1.1	-0.1

Source: NSO.

Table 6 shows that the annual statistical discrepancies are not very large. The largest discrepancy was recorded in 2021 and amounted to 2.6 percent of GDP. However, the quarterly statistical discrepancies are

much larger. The average percentage of the quarterly statistical discrepancies in 2019–2024 is 4.5 percent of the total GDP, and the largest discrepancy was equal to 17.9 percent in the third quarter of 2022.

**21. The mission noted that large quarterly statistical differences may be due to the time lag between coal production and export.** Depending on the distance and complexity of transportation, a few months may elapse between the production of coal and its export. If a company has concluded a contract for the export of coal immediately after production and has loaded the coal for export, it will no longer be considered as part of inventory. On the other hand, the product has not yet reached its new owner and while it is in transit it is not considered an export of goods. As soon as the product reaches its purchaser, its export is recorded at that moment, but technically this may occur in a different quarter. Taking this into account, the change in inventories should be increased in the period from coal extraction to export, while the same change in inventories should be recorded with a negative sign when export is recorded. Such recording of transactions would significantly reduce quarterly statistical discrepancies.

**22. The NSO compiles GDP-P at the previous year's prices independently of the GDP-E estimates.** This is very good practice as it allows for comparison of these two methods. However, it does not ultimately balance the two methods and real GDP growth rates remain different. Currently, the NSO publishes two different real GDP growth rates, which leads to confusion of users. The mission noted that it is necessary to balance the GDP-P and GDP-E and publish the same real GDP-P and GDP-E growth rates. The mission and NSO staff agreed that the next national accounts mission, planned for the first half of 2026, will assist the NSO in balancing quarterly GDP-P and GDP-E estimates.

### Recommended actions

- Compile the 2024 SUT at current prices.
- Ensure the balance of quarterly coal production and export.
- Reconcile the quarterly real GDP-P and GDP-E estimates.

### C. OFFICIALS MET DURING MISSION

Name	Institution	Position
Mr. Batdavaa Batmunkh	NSO	Chairman
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Ms. Tserenkhand Jagir	NSO	Senior statistician, National Accounts Division of Integrated Statistics Department
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