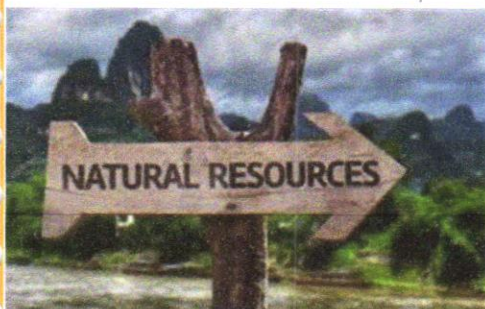
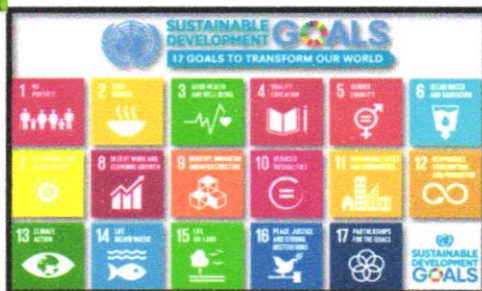




NATURAL RESOURCE ACCOUNT OF MADHYA PRADESH

FOR THE YEAR 2020-21

MINERAL & ENERGY RESOURCES



**An initiative of Government Accounting Standards Advisory Board
under the aegis of CAG of India**

August 2023

Table of Content

Particulars	Reference to para	Page
Message of State Government		iii
Message from the Accountants General		v
Executive Summary		vii
Disclaimer Statement		ix
Chapter 1-Introductory		
Natural Resource Accounting-the Concept	1.1	1
Chapter 2 – Implementation of NRA in India- GASAB’S Endeavour		
About (GASAB) Government Accounting Standards Advisory Board	2.1	3
Concept paper on NRA in India- released by GASAB	2.2	3
Goal 1 of the action plan envisaged in the concept paper	2.3	4
Why- Mineral and energy resources	2.4	5
Advantages of consolidating the Asset Accounts on Mineral and energy resources	2.5	5
Evolution of the final templates	2.6	7
Additionalities-monitoring the targets committed to COP-26	2.7	7
Consultative Process	2.8	8
Training and capacity building	2.9	8
Onboarding and handholding the States	2.10	8
Chapter 3 – Initiatives in the States		
Formation of State NRA Cell	3.1	9
Follow up, trainings and capacity building	3.2	9
Innovations and good practices	3.3	10
Chapter-4- Mineral Profile Of State and Shortlisting of Resources		
Mineral profile of Madhya Pradesh	4.1	11
Strategic importance of minerals for the States	4.2	12
Mining process followed in the State	4.3	12
Contribution of mineral resources in the revenue of the State	4.4	13
Shortlisting of resources for this study	4.5	14
Chapter 5- Asset Account of Mineral and Energy Resources of Madhya Pradesh		
Scope	5.1.1	15
Objective	5.1.2	15
Methodology of data collection and compilation of physical flows	5.1.3	15
Methodology of monetization of physical flows	5.1.4	16
Dual stage validation and limited verification of data	5.1.5	17

Challenges and limitations	5.1.6	17
Asset Account on Mineral & Energy Resources	5.2	
Highlights	5.2.1	18
Asset Account- the tables	5.2.2	20
Findings of the study	5.2.3	31
Recommendations	5.2.4	32
Chapter 6 – Future continuity plan		
Guidelines/ SOP's Issued by GASAB	6.1	35
Need for Mapping the supply and use/sales/ export	6.2	35
Quarterly reporting framework	6.3	36
Recommendation for improving management of mineral and energy resources of the state and optimization of revenue yields therefrom	6.4	36
Annexures		
Constitution of NRA Cell (AsG & State)		39
Minutes of meeting of State NRA Cell.		44

MESSAGE OF STATE GOVERNMENT

मध्यप्रदेश शासन खनिज साधन विभाग

सुखवीर सिंह भा.प्र.से.
प्रमुख सचिव



मंत्रालय
वल्लभ भवन, एन.कसी-II,
भोपाल - 462004

फ. - 14303

भोपाल, दिनांक 18.10.2022

संदेश

भारत 2002 में भारत के नियंत्रक एवं महालेखापरीक्षक द्वारा भारत सरकार के सहयोग में GASAB की स्थापना की गई। GASAB मुख्य रूप से राज्य एवं केन्द्र सरकार की प्रतिनिधि मण्डल जिसकी जिम्मेदारी वित्त एवं लेखा संबंधी विषयों पर सरकार को सलाह देना एवं निर्धारित मापदण्डों में सुधार करना है। GASAB लेखा एवं वित्त विषयों के मापदण्डों में सुधार के साथ-साथ प्राकृतिक संसाधनों के लेखा विषयों पर विगत दो वर्षों से कार्यशील है।

हमारी आर्थिक उन्नति का आधार मुख्यतः प्राकृतिक संसाधनों पर निर्भरता रही है। वर्तमान में संसाधनों की उपलब्धता एवं आर्थिक विकास परस्पर एक दूसरे के पूरक है।

किसी भी देश की आर्थिक उन्नति एवं सामाजिक आर्थिक विकास का आधार वन एवं खनिज संसाधनों का उचित विदोहन, संरक्षण एवं क्रमिक आंकलन ही है तथा हमारे देश के साथ-साथ विश्व के अनेक देशों ने इस ओर ध्यान देना प्रारंभ कर दिया है जिसके कारण संपोषणीय विकास का संभावनाएँ बलवती हुई हैं।

इस क्रम में GASAB द्वारा किये गये प्रयास ना केवल प्रशंसनीय है अपितु सराहनीय भी है जिसके अधीन विभिन्न प्राकृतिक संसाधनों की लेखा एवं वित्तीय आयामों पर डाटाबेस तैयार कर विश्व में वन एवं खनिज संसाधनों के प्रयोग एवं खनिज/वन आधारित उद्योग की स्थापना एवं संपोषणीय प्रकृति पर उचित प्रबंधन योजना तैयार की जा सकेगी जो पर्यावरण संरक्षण विकास एवं देश के आर्थिक विकास में सहभागी रहेगा।

यहाँ यह उल्लेख करना भी प्रासंगिक समझता हूँ कि GASAB द्वारा अतिअल्प समय में कार्यवाही पत्र तैयार किया है जिसके लिए GASAB के सभी सहयोगीगण का साधुकाद ज्ञाति ज्ञात है।

मुझे पूर्ण विश्वास है कि GASAB द्वारा इस अत्याधुनिक युग में प्राकृतिक संसाधनों का आंकलन करने जैसी महती भूमिका का निर्वहन कर राज्य सरकार, भारत सरकार की संस्था एवं अन्य निजी संस्थाएँ एवं एकेडेमीशियन्स के लिए भविष्य में उपयोगी साबित होगा।

शुभकामनाओं सहित

भवदीय
(सुखवीर सिंह)

प्रति
प्रधान महालेखाकार
(लेखा एवं हकदारी)-प्रथम
मोप्रोक्षासी रोड, ग्वालियर (मोप्रो)

फोन : 0755-2708307

ई-मेल : secymining@mp.gov.in वेबसाइट : www.mpsmcl.mp.gov.in

MESSAGE FROM THE ACCOUNTANTS GENERAL

Natural Resources Accounting is the need of the moment all over the world considering the fast depletion and degradation of the resources in human quest for economic growth and sustainable development. Environmental issues such as carbon emission have also forced us to rethink on the whole process of economic activities. Economic activities have a bearing far beyond our present budgeting and accounting systems. Natural Resources Accounting surely helps to see different aspects of environmental accounting, climate change and sustainable development goals vis a vis economic growth. Government Accounting Standards Advisory Board (GASAB) has taken an exemplary initiative and come up with a road map for the Field Offices and the State Government in the form of the book 'Concept Paper on Natural Resource Accounting in India' in the year 2020 and subsequently planned 'Asset Accounts on Mineral and Energy Resources in States 2020-21' as its first accounting of natural resources.

Madhya Pradesh is the second largest State in the country. The State is spread over a geographical area of 3,08,245 sq.km. and is home to around 7.26 crore persons as per Census 2011. The State consists of large number of Major and Minor Minerals such as Diamond, Coal, Iron ore, Bauxite, Copper, Limestone and Rock phosphate etc. It was a herculean task to collect the data from grass root level units considering the geographical area and demography of the State. We faced many obstacles during the preparation of the said accounts including deployment of human resources exclusively for this task and training to officials for this assignment although our teams got infected during Covid-pandemic. Despite the obstacles, things went well due to dedicated efforts and diligence of the team. We finally came up with the accounts which were well prepared under the guidance, support, suggestions and instructions of the GASAB. Cooperation from the State Government and its officials during the whole process are praiseworthy and commendable. As it was a new initiative and different from general accounting, it required extra endeavour on the part of each stake holder involved.

We are aware that there is long way to go and a lot more to be done in coming days to see Asset Accounts as fully functional and subsequently form an integral part of conventional accounting. But we are steadfast in our goals and eager to achieve them in the larger interest of our country.

We will continue to put in our best efforts, support and hard work to achieve the task.



(Priya Parikh)
Accountant General, Audit-II
Madhya Pradesh, Bhopal



(Geetali Tare)
Principal Accountant General
Accounts and Entitlement-I
Madhya Pradesh, Gwalior

Executive Summary

The GASAB Secretariat in CAG's Office has come out with a Concept Paper on NRA in India in July 2020 which, inter-alia, envisaged a three-term plan for implementation of NRA in India in consonance with the strategy enshrined in the System of Economic and Environmental Accounting – Central Framework of the UN.

Besides the plans, the Concept Paper also suggested the templates for preparation of Asset Accounts on Mineral & Energy Resources. Simultaneous to the release of the Concept Paper, pilot studies were initiated (August 2020) in five States preparing the model Asset Account on Mineral and Energy Resources in the States.

The final formats of Asset Accounts on Mineral & Energy Resources were released in the shape of a book in October 2021 for implementation in the States. First draft Asset Accounts was targeted for the year 2020-21 to be completed by March 2022.

Subsequently, in view of the national declaration at the Conference of the Parties (CoP) 26, efforts were made by GASAB to incorporate templates for collating information on progress in generation of renewable energy in States. These were intended to help the States and the Union to have a bird's eye view of the progress made towards meeting the targets committed by the country at the CoP 26.

The work on preparation of the Asset Accounts in the State of Madhya Pradesh commenced with joint efforts of the Accountants General Offices and the State Government. This Report presents the first draft of the Asset Accounts on Mineral and Energy Resources in the State of Madhya Pradesh.

Effective implementation of a system of generating Asset Accounts on Mineral and Energy Resources in the State would aid in evidence-based good governance and have the following specific advantages.

- Preparation of NRA and meet the commitment made to meeting SDGs and SEEA framework.
- Resources at a glance - a one pager document on State-wise major and minor minerals.
- Compilation of physical and monetary values to enable cross verification of revenues vis-à-vis actual extractions.
- Provide pace of exploitation – to bring out sustainability of resources.
- Analysis of revenue vis-à-vis market value/export value will make it easier to assess and review the royalty rates – to protect State's revenue interest.
- Enable assessment of revenue streams for the future.
- Mine-wise data on resources – pan India.
- Enabler of identification of alternate resources (economic as well as energy).
- Close monitoring on illegal mining, and
- Progress on commitment made at COP 26

Salient features of the following may be mentioned hereinafter:

- 1. Creation of State NRA Cell.** The NRA cell was formed in the State under the chairmanship of Commissioner of Treasury and Accounts (Finance Department) with the members from office of AsG , Department of Geology and Mining, Water Resources, Revenue, Economic and Statistics, Environment and Forest.
- 2. Unique collaboration between Accountants General Offices and the State Government departments to prepare this compilation.**

Both the offices extended full co-operation to each other during the entire process of compilation in a time bound manner. Action plan was prepared, and meetings were held to discuss and clear the doubts.

- Training and workshops organised with commissioner of Treasury and Accounts, joint teams of AsG and stakeholders.
 - Online facility has been developed to prepare mineral related database, submission of application forms by the beneficiaries and E-auction facility also existed for auction of minerals.
- 3. Major findings of the Asset Account Report, disclaimers/exclusions and recommendations. (Para 5.2.3)**
 - Differences have been noticed between the information about dispatch of minerals provided by State Government and Indian Bureau of Mines (IBM-Nagpur).
 - Grade wise details of minerals were not available with DMOs/DGM.
 - Separate Detail and Sub-detail heads are not available in the State budget to capture Mineral wise information on royalties, penalties, consultancy charges, application fees, dead rent, surface rent etc.
 - Information regarding DMF realisable is not available with DGM.
 - 4. Recommendations (Para 5.2.4)**
 - The Annual/Monthly returns of the minerals may be shared with the State government along with the IBM by all the Lessees so that the data can be captured in entirety and the variation between the IBM and State figure can be minimized.
 - Grade-wise details of production of minerals may be properly maintained as required vide MCDR, 1988 as amended.
 - Separate Detail and Sub-detail heads may be opened in the State budget to capture Mineral wise information on royalties, penalties, consultancy charges, application fees, dead rent, surface rent etc.
 - The DMF task should be managed more efficiently to ensure assessment of DMF realizable for a closer look on the DMF realized.

Disclaimer Statement

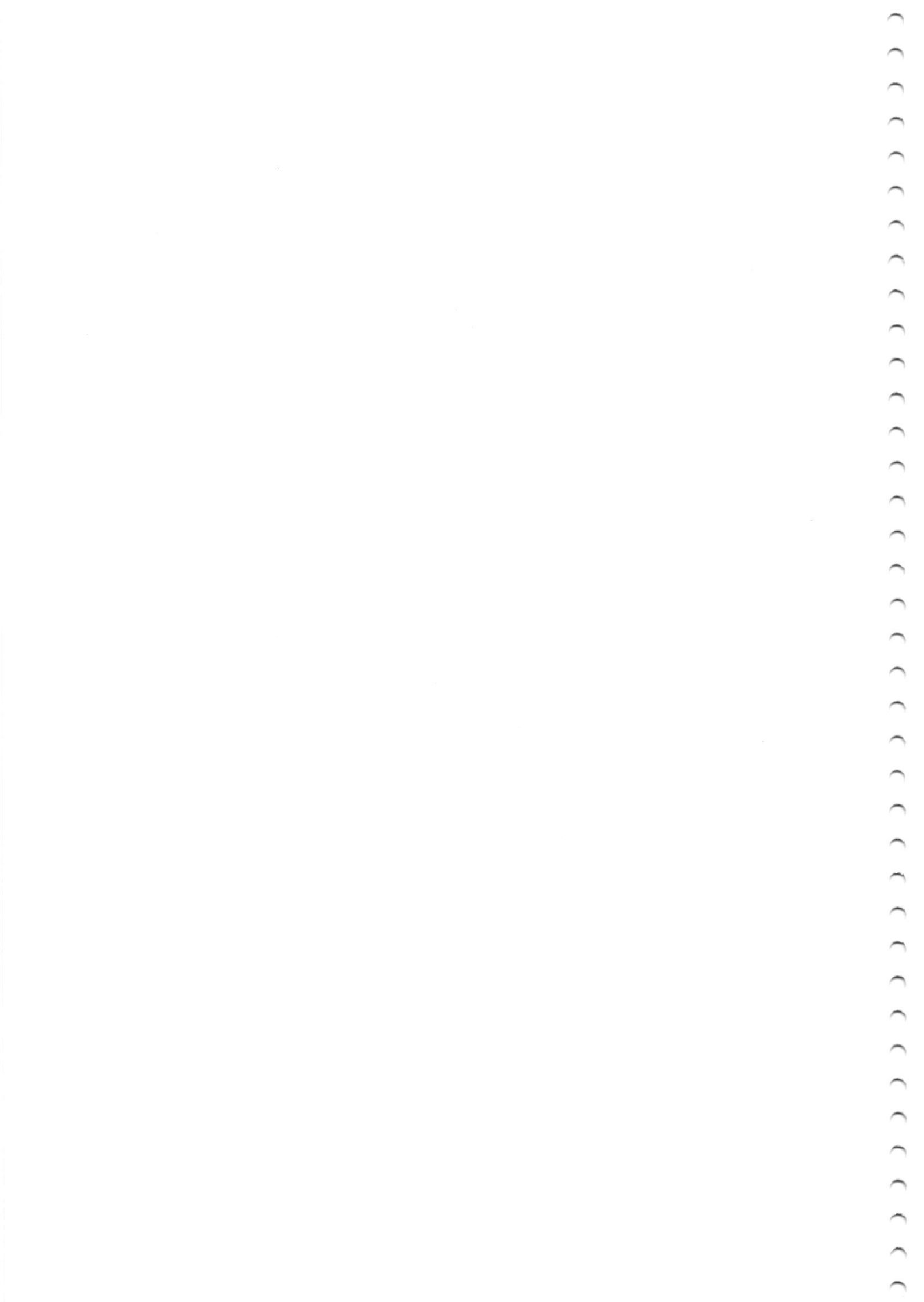
Preparation of Asset Accounts is part of four-stage implementation strategy coined by the System of Economic and Environmental Accounting – Central Framework. This in turn is part of the Sustainable Development Goals to which India is a signatory. Thus, preparation of Asset Accounts on selective resources is an obligation for the country to be able to meet the international commitments.

The endeavour of Government Accounting Standards Advisory Board under the aegis of institution of Comptroller and Auditor General of India through its Accountants General Offices in States is only aimed at handholding the States in implementing Natural Resource Accounting commencing with the preparation of the first draft of Asset Accounts on Mineral and Energy Resources in a uniform and robust manner. Once the comprehensiveness and reliability of Asset Accounts prepared by the State Government stabilizes, State Government will produce this on regular basis.

The Asset Accounts have been prepared solely based on information/data provided by the concerned departments of the State Government and GASAB/CAG of India disclaims any responsibility for their correctness/inclusivity.

The limited verification by Audit Office is a test check that the data/information are supported by primary documents maintained in the offices of the concerned departments and is not an audit of stock of minerals and mining activities in the State.

Sustainability of resources is arrived by dividing the closing stocks of a particular year with annual reduction in that particular year. Hence the years shown in sustainability of resources may vary depending on the production/ reduction of the mineral of the particular year.



CHAPTER 1

INTRODUCTORY

1.1 Natural Resource Accounting – the Concept

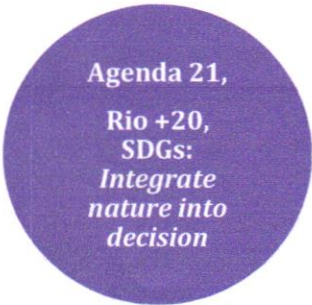
Economic growth over decades has largely been an outcome of continued reliance on natural resources. Growth is clearly the major engine to create livelihood options; its reliance on increased resource use has, however, led to many negative externalities. The current paradigm of resource-led economic development sees a coupling between the availability of natural resources and economic growth.

Natural resources play a crucial role for economic development of a country and are crucial for their inbuilt value of inter-generational equity and sustenance.

Over the years, there has been increasing awareness about environmental issues across the globe and growing concern about the depletion and degradation of the natural resources. This concern gave birth to the idea of sustainable development goals which aims at ending poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030. The sustainable development dialogue has brought to the fore the direct and indirect impact of human activity on the environment and there is now a consensus that continuing economic growth and human welfare are integrally dependent on the benefits obtained from the environment. The critical trade-offs between managing ecosystems and environmental resources for future sustainable economic and social development need to be understood for effective policy interventions.

Natural resources play a vital role in the sustainable economic development of any country. They need to be exploited in a sustainable manner so that the future generations can also avail of their advantages. The rampant over exploitation of these resources in recent times has resulted in harmful impact on the environment and issues of climate change and global warming have become a matter of discussions and deliberations round the Globe.

Conventional accounting captures data only of the measurable economic activity. In order to overcome this shortcoming and to capture the intimate interplay between the economic indices and the various components of the natural environment, the concept of NRA has emerged.



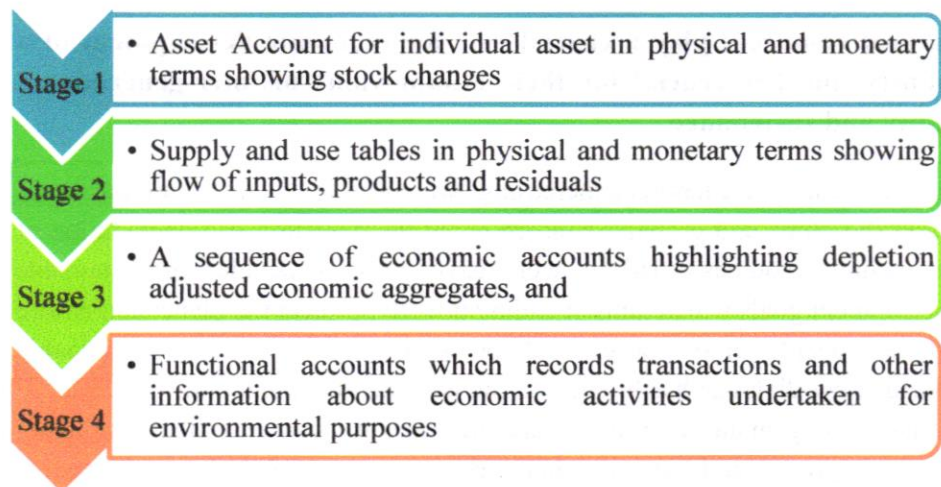
Agenda 21,
Rio +20,
SDGs:
*Integrate
nature into
decision*

It is based on the concept “Measurement of a resource leads to its better Management ”.

The idea is to quantify the damage to the environment so that it can be reduced from Gross Domestic Product (GDP) to arrive at Green GDP. It would assist in taking policy decisions in respect of matters affecting environment directly and indirectly and provide necessary directions to use our resources on a more sustainable basis and reducing the negative impact on the environment.

In keeping with the developments, the United Nations has been working towards an universally acceptable framework on environmental resource accounting which culminated into release of the System of Economic and Environment Accounting - Central Framework (SEEA - CF) in 2012 which is the latest internationally accepted framework.

The SEEA (CF) prescribes a four-stage implementation process by compiling the following accounts as mentioned below:



However, while prescribing the aforesaid milestones for implementation of NRA across the world, the SEEA (CF) has also envisaged constraints to be faced by the countries in implementing NRA. SEEA (CF), thus, prescribed for flexibility in designing the accounts based on the specific environmental issues faced by a government. Depending upon the specific environmental issues faced, a country may choose to implement only a selection of the accounts included in the SEEA (CF). The SEEA (CF) provides that even if a country desires eventually to implement the full system, it may decide to focus its initial efforts on those accounts that are most relevant to current issues.

CHAPTER - 2

IMPLEMENTATION OF NRA IN INDIA – GASAB'S ENDEAVOUR

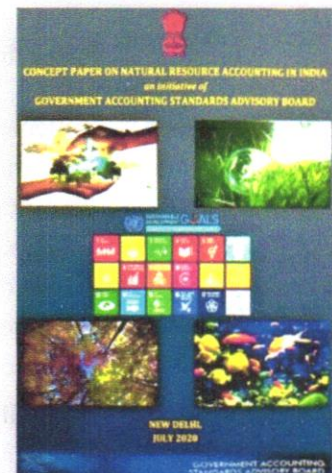
2.1 About (GASAB) Government Accounting Standards Advisory Board

The Government Accounting Standards Advisory Board (GASAB) was established in 2002 by the Comptroller and Auditor General of India with the assistance of Government of India to formulate Government accounting standards for improving Government accounting and financial reporting.

2.2 Concept Paper on NRA in India – released by GASAB

GASAB has taken the initiative (2019) to develop a framework for implementing NRA on priority as a nationally important project.

A Concept Paper on Natural Resource Accounting in India - a product of Government Accounting Standards Advisory Board (GASAB) was published in July 2020. Keeping the international as well as national developments on NRA in view and the mandate of GASAB in suggesting accounting framework for enhancing the quality of decision making and public accountability combined with suggestion of Working Group on Environmental Auditing under the INTOSAI to handhold the country in developing NRA in mind, the Concept Paper was a result of GASAB's efforts towards helping the causes of environmental accounting in India, climate change, and sustainable development goals.



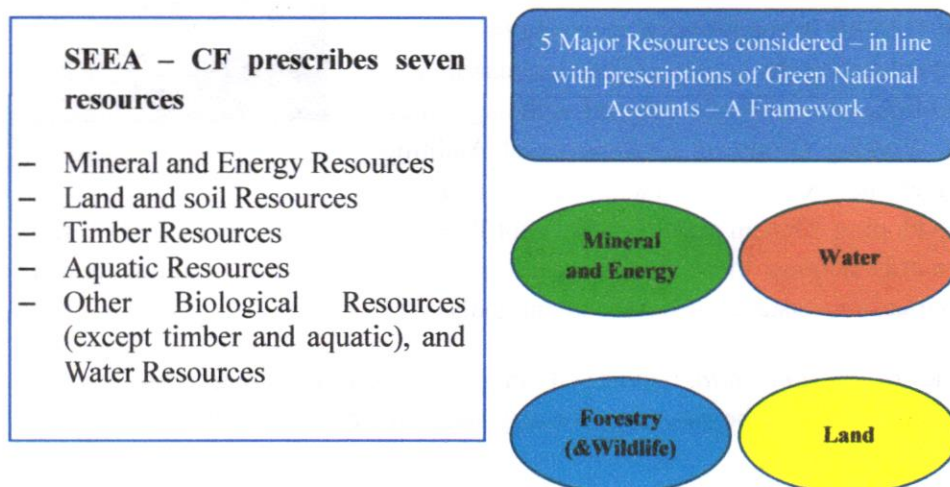
The Paper, *inter-alia*, envisaged short, medium and long term goals in consonance with the four stage strategy suggested by the SEEA Framework, as mentioned below:

Short term goals	Mid-term goals	Long term goals
1. Preparation of Asset Accounts on Mineral and Non-Renewable Energy Resources in States	1. Preparation of National Asset Accounts on Mineral and Non-Renewable Energy Resources	1. Preparation of the economic accounts highlighting depletion adjusted

2. Initiation and preparation of disclosure statement on revenues and expenditure related to natural resources (2019-20 to 2021-22)	2. Preparation of Asset Accounts in respect of other four resources namely water, land and forestry & wildlife resources in the States 3. Preparation of supply and use tables in physical and monetary terms showing flow of natural resource inputs, products and residuals (2022-23 to 2024-25)	economic aggregates; and 2. Preparation of functional accounts recording transactions and other information about economic activities undertaken for environmental purposes. (2025 - 26 onwards)
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2.3 Goal 1 of the action plan envisaged in the Concept Paper

The initial stage of implementation strategy of NRA is preparation of the Asset Accounts on individual resources. The SEEA (CF) has listed out seven resources of which five major resources namely Mineral & Non-Renewable Energy Resources, Water Resources, Forestry & Wildlife Resources and Land Resources have been considered for taking up initially in the Concept Paper on NRA as mentioned in the table and diagrams below:



2.4 Why - Mineral and Energy Resources

The Asset Accounts on Mineral & Energy Resources have been considered as the most important goal as it consists of non-renewable resources while other major resources fall in the other group and gets renewed naturally. In keeping

Mineral & Energy Resources, being non-renewable resources have been considered as the first goal

with the implementation stages as envisaged in the SEEA (CF), the flexibility embedded therein and the importance of resources discussed above coupled with the prescription of SEEA that a country may decide to focus its

initial efforts on those accounts that are most relevant to current issues, preparation of Asset Accounts on Mineral & Energy resources have been conceptualised as the need of the hour and thus planned as the short term goal No. 1.

2.5 Advantages of consolidating the Asset Accounts on Mineral & Energy Resources

A system of collation of a periodic database in the shape of an Asset Accounts on available natural resources linked with inter-related factors like revenues and costs involved in exploitation of such resources, their sustainability for the future generations would be extremely helpful in monitoring the sustainability of resources, effective decision making, adoption/adaption of SEEA besides attaining other pressing international obligations like the Sustainable Development Goals and Climate Change.

Besides the above, the Asset Accounts would aid in evidence based good governance with the following specific inputs:



Resources at a glance: The Asset Accounts would enable a one pager document on the resource availability of each State.

Provide invaluable information and datasets on mineral repository and potential of States – could be used to showcase for varied purposes.

Physical flows and monetary values mapped – enabler of working out the value of extracted resources and also to help in monitoring of realisation of revenues vis-à-vis extraction of resources to help in identifying cases of leakage of revenue.

Pace of exploitation: Down the years, compilation of Asset Accounts would help in drawing up the pace of exploitation of resources over the years thus bringing out vital inputs like the pattern of resource usage and sustainability of resources – in years.

Revenue vis-à-vis market value: Ascribing money value with reference to the royalties/revenues combined with the market value would aid in continuous analysis of the royalty/duty/taxes to help the public exchequer.

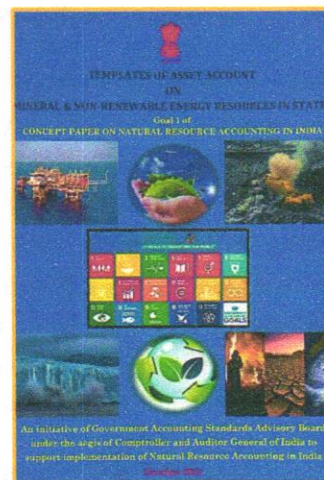
Sustainability of minerals in years – When analysed with revenues, has the potential to point towards revenue streams for future and will also enable States to identify alternate resources – both economic and energy resources.

Close monitoring on illegal mining: The inter-operability of supply and use of resources and their incorporation in the system of preparation of Asset Accounts would enable close watch on illegal mining. This will not only help in optimizing resource base but will also help in containing unscientific mining thereby aiding in conservational efforts and restricting environmental degradation.

Thus, to sum up, Asset Accounts-once compiled, would bring out State-wise mineral repository along with other inputs like actual stock of resources, usage pattern, their values - aiding in evidence-based policy framing and most importantly sustainability of resources for future generations.

2.6 Evolution of the final templates

The templates of Asset Accounts on Mineral and Energy Resources have been finalised after incorporating the comments of the Consultative Committee members and the experience gained in successful completion of pilots in three States. While the core framework as prescribed by the SEEA – CF has been retained, designs of the sub and detailed tables have been worked out based on country specific needs and other peculiarities besides constraints/data availability etc to capture data required for the core framework and also to serve as repository of an inclusive informative database for use by policy makers, stakeholders, academia and other interest groups. The templates, as they stood then, were released in the form of a book titled Templates of Asset Accounts n Mineral and Energy Resources in States in October 2021.



The formats were constantly updated with inputs and experiences gained through their implementation in the States from October 2021 through March 2022. The final formats included six main tables for capturing the basic asset accounts (Table 1), asset accounts on physical flows along with sustainability of resources (Table 2), physical flows of riverine resources (Table 2A), valuation of riverine resources (Table 2B), subsidiary asset accounts linking physical flows with valuation of resources (Table 3), information on illegal mining (Table-3A), analysis of extraction, production and dispatch of resources (Table 4), and collection under district mineral foundation (Table 5).

2.7 Additionalities – monitoring the targets committed to COP - 26

At the United Nations Climate Change Conference of 2021 or the COP 26, the Government of India committed the following:

1. *India will take its non-fossil energy capacity to 500 GW by 2030.*
2. *India will meet 50 percent of its energy requirements from renewable energy by 2030.*
3. *India will reduce the total projected carbon emissions by one billion tonnes from now till 2030.*
4. *By 2030, India will reduce the carbon intensity of its economy by more than 45 percent.*

5. By the year 2070, India will achieve the target of Net Zero.

In order to monitor the progresses to attain the above commitments, specific input tables for collecting and collating information progress on generation of new and renewable energy have been envisaged as Table 6.

2.8 Consultative Process

To ensure wider consultation with diverse stakeholders, GASAB has constituted consultative group in GASAB headquarters consisting of Ministries in Government of India, five State Governments and the Accountants General in these States, expert agencies like National Remote Sensing Center (NRSC), The Energy and Resources Institute (TERI) etc. Idea of constituting the groups was to draw technical expertise and inputs from subject experts and academia while steering the implementation process following the action plans suggested in the Concept Paper, with special emphasis on the preparation of Asset Accounts on the Mineral and Energy Resources in the States.

2.9 Training and capacity building

As the Concept Paper envisaged commencement of the project from States, it was important that proper training and capacity building was ensured for the Officers and staff members of not only the Accountants General Offices but the State Government Departments as well. Accordingly, virtual trainings/workshops including State specific workshop were continuously held over the time of implementation of the project.

2.10 Onboarding and handholding the States

In order to take the States on Board as one of the most vital stakeholders in the implementation process, the highest echelons in the States were demi-officially informed (September 2021) by the Deputy CAG & Chairperson, GASAB about the endeavour of GASAB and vision of the project which was followed up with virtual presentations to the States. Seven virtual meetings were held in August – September 2021 covering 28 States. The views/suggestions emanating out of these meetings were taken into consideration in updating/modifying the templates.

CHAPTER - 3

INITIATIVES IN THE STATE

3.1 Formation of State NRA Cell

The NRA Cell was formed in the State under the chairmanship of Commissioner Treasury and Accounts (Finance Department) with the members from office of AsG, Department of Geology & Mining, Water Resources, Revenue, Economic and Statistics, Environment and Forest. Detail of NRA Cell is shown in an annexure (Annexure-A) at the end of the report.

3.2 Follow up, trainings and capacity building

Concept Paper on Natural Resource Accounting in India' and 'Guideline/Standard Operating Procedures for preparation of Asset Accounts on Mineral and Energy Resources in States' were circulated to the State Government for their reference. An introductory meeting was held between the members of NRA Cell of Audit and Accounts Office with the officials of Directorate, Geology and Mining (DGM) to familiarize them with the different Tables of Asset Accounts envisaged in the Concept Paper and the requirement/sources of the data for filling the information in Asset Accounts. The process for arriving at the opening reserve for the year 2020-21 was also discussed in detail. More details about training and workshops organised are shown in the table given below-

Date	Particular	Remarks
29.12.2021	Meeting	Chaired by Commissioner Treasury & Accounts
10.01.2022	Training	Organised for the Joint Team of AsG.
11.02.2022	Workshop	Organised for officials of stakeholders.

Further, in order to familiarize with the necessity and handhold the State Government in preparation of Asset Account, the officials of DGM were invited to attend the monthly meetings conducted by GASAB, where they could share their views and constraints faced by them in providing the required

data/information. The officials of DGM were proactive in resolving the issues that arose during the process of preparation of Asset Accounts which in turn facilitated in preparing a correct and true Asset Accounts as per the Guidelines/SOPs issued by GASAB.

3.3 Innovations and good practices

The State Government has adopted following innovations and good practices for convenience of beneficiaries concerned-

- Online facility has been developed to prepare mineral related database in the state.
- User friendly online facility has also been developed for submission of application forms by the beneficiaries.
- For the convenience of the beneficiaries, process of issuing online passes for extraction of minerals is operational since 2017.
- E-auction facility also existed for auction of minerals.

CHAPTER - 4

MINERAL PROFILE OF STATE AND SHORTLISTING OF RESOURCES

4.1 Mineral profile of Madhya Pradesh

Mineral map of the State showing the availability of major minerals in various parts of the State with their GPS coordinates is yet to be prepared by State Government. The geo-tagging/fencing of the mines in state is completed for major minerals. All minerals as confirmed by State Government endowed in the State with their district wise geographic distribution is listed below.

Table-A: District wise details of Minerals	
Mineral's Name	Districts
Bauxite	Balaghat, Guna, Jabalpur, Katni, Mandla, Rewa, Satna, Shahdol Shivpuri, Sidhi & Vidisa
Calcite	Barwani, Jhabua, Khandwa & Khargone
China Clay	Betul, Chhatarpur, Chhindwara, Gwalior, Hoshangabad, Jabalpur, Khargone, Narsinghpur, Raisen, Satna, Shahdol & Sidhi
Copper	Balaghat, Betul & Jabalpur
Coal	Betul, Shahdol, Chhindwara & Singrauli
Diamond	Panna, Chhatarpur
Diaspore & Pyrophyllite	Chhatarpur, Shivpuri & Tikamgarh
Dolomite	Balaghat, Chhindwara, Damoh, Dewas, Harda, Hoshangabad, Jabalpur, Jhabua, Katni, Mandla, Narsinghpur, Sagar And Seoni
Fireclay	Betul, Chhindwara, Jabalpur, Katni, Narsinghpur, Panna, Sagar, Shahdol & Sidhi
Iron Ore	Gwalior, Jabalpur & Katni
Limestone	Damoh, Dhar, Neemach, Rewa, Satna, & Sidhi
Manganese Ore	Balaghat And Jhabua
Ochre	Dhar, Gwalior, Jabalpur, Katni, Mandla, Rewa, Satna, Shahdol & Umaria
Pyrophyllite	Chhatarpur, Sagar, Shivpuri & Tikamgarh
Quartz/Silica Sand	Balaghat, Dewas, Dhar, Jabalpur, Khandwa, Khargone, Morena, Rewa & Shahdol
Talc/Steatite/Soapstone	Dhar, Jabalpur, Jhabua, Katni, Narsinghpur & Sagar
Vermiculite	Jhabua
Barytes	Dewas, Dhar, Shivpuri, Sidhi & Tikamgarh
Calcareous Shales	Mandsaur
Feldspar	Jabalpur & Shahdol
Fuller's Earth	Mandla
Gold	Jabalpur And Sidhi
Granite	Chhatarpur, Chhindwara, Datia, Jhabua, Panna, Seoni & Shivpuri
Graphite	Betul & Sidhi
Gypsum	Shahdol
Lead-Zinc	Betul
Molybdenum	Balaghat
Rock Phosphate	Chhatarpur, Jhabua & Sagar
Quartzite	Schore
Sillimanite	Sidhi

Source: State Government

4.2 Strategic importance of minerals for the State

Mineral resources play a very important role in the sustainable development of the State. In the terms of mineral availability Madhya Pradesh is the fourth mineral prosperous state while in the terms of mineral prosperity the State is one of the 8 mineral affluent states of the nation. Currently more than 20 kinds of minerals are being produced in the State. Along with having monopoly in diamond production in the Country, the State has also got first position in Manganese, Pyrophyllite and Copper ore production. In addition, the State possesses the second position in production of Diaspore, Rock - Phosphate, Shell and Fire Clay and Third position in the production of Limestone and Ochre. The State has fourth position in Coal production in National scenario.

According to the development needs, the demand of minerals increases together with industrial development. Continuous work is being done by Mineral Resources Department through conservation, exploration and continuous monitoring on exploitation of minerals under the Rules valid by the Law. Exploitation of some minerals is also being carried out by Madhya Pradesh Mining Corporation, which is constituted under the Mineral Resources Department. The tasks being operated by the Department are increasing the State fiscal revenue continuously and paths are also being paved for discovery of new mineral deposits.

4.3 Mining process followed in the State

Major Mineral: The Mining lease for major mineral block is granted as per Mineral Auction Rules, 2015 and the amendment there of by e-auction methodology. DGM initiate the process of mineral block if the mineral contents in such area has been established in accordance with the provisions of the Minerals (Evidence of Mineral Contents) Rules, 2015. The Notice Inviting Tender (NIT) is issued by DGM on MSTC portal (The Platform provider for e-auction of the state) after receiving approval from Mineral Resources Department (MRD).

The Highest Bidder is identified by DGM after two phase e-auction process and is forwarded to MRD for being declared as preferred Bidder. The preferred Bidder is then directed to deposit the first installment. Twenty percent of upfront payment and after submission of upfront payment Letter of Intent (LOI) is issued by MRD. Preferred bidder become successful bidder upon payment of second installment being Twenty percent of upfront payment along with performance security as specified in Tender Document and Submit Mining Plan within six months satisfying such other conditions as may be specified by the State Government.

The Successful bidder shall sign the Mine Development and Production Agreement with the State Government upon obtaining all contents, approvals, permits, no-objections and the like as may be required under applicable laws for commencement of mining operations. The Successful bidder shall pay the third instalment being sixty percent of the upfront payment subsequent to execution of the Mine Development and Production Agreement, and upon such payment the state Government shall grant a mining lease to successful bidder. The Mining Lease Deed shall be executed by the State Government within thirty days of the date of completion of the condition specified in sub-rule (5) of Mineral Auction Rules, 2015, and shall be subject to the provisions of the Act and the rules made there under.

4.4 Contribution of mineral resources in the revenues of the State

Madhya Pradesh is one of the major eight mineral-rich states of the Nation, therefore, revenue receipts from mineral resources play very important role in sustainable development of the State. Detail of the revenue receipt from the mineral resources to the Government of Madhya Pradesh during the period between 2016-17 and 2020-21 are as under-

Year	Total Revenue Receipt (In crore ₹)	Non-tax Revenue Receipt (In crore ₹)	Revenue Receipt from Mineral Resources (In crore ₹)	% to Total Revenue Receipt	% to Non-tax Revenue Receipt
2016-17	12,33,06.79	90,86.51	6,38.66	0.52	7.03
2017-18	13,48,75.39	90,61.18	20,00.60	1.48	22.08
2018-19	14,88,92.79	1,18,98.69	23,26.69	1.56	19.55
2019-20	14,76,43.35	1,03,49.56	26,23.56	1.78	25.35
2020-21	14,63,76.79	99,02.13	28,34.70	1.94	28.63

Thus, during 2020-21 the Revenue Receipts from Mineral Resources (0853-102-Mineral concession fees, rents and royalties) constituted 1.94 percent of the Total Revenue Receipts and 28.63 percent of Non-tax Revenue Receipts.

4.5 Short-listing of resources for this study

To collect the data/information in prescribed format of all major and minor minerals available in the state, a Joint Team from the officials of both the field offices (Audit and Account offices) was formed. Joint Team was sent to all the District Mineral Offices (DMOs) and they collected the data/information of all the minerals available in the respective district. All the data/information provided by the DMOs were not completely supported by the documents as proper records were not maintained by them in respect of minor minerals. Supported documents were neither available with DMOs nor any data/information is available with Indian Bureau Mines in respect of the minor minerals. Therefore, with mutual consent of the State Government and the Accountant General's Offices and also keeping in view the time limit for submission of this very first report, it was decided to include only Major Mineral in the report for the year 2020-21. The list of Major Minerals shortlisted for inclusion in the report for the year 2020-21 are as follows: -

1.Coal	2. Limestone	3. Copper	4. Diamond
5. Bauxite	6. Manganese	7. Iron Ore	8. Rock Phosphate

Minerals those have been left out from the Asset Accounts for the year 2020-21 owing to non-availability of documents supported data/information, will be included in subsequent Asset Accounts in phase wise manner.

CHAPTER-5

ASSET ACCOUNT OF MINERAL AND ENERGY RESOURCES

5.1.1 Scope

The scope of the project is to prepare the Asset Account for the Mineral and Energy resources for the year 2020-21. This involved the work of ascertaining the opening stock of minerals, growth /discovery of the mineral, reduction of minerals due to extraction, arriving at the closing stock of the mineral, ascertaining the market value of the minerals and sustainability of Minerals. All minerals available in the state were not included in the Asset Accounts 2020-21 as only proved reserves were to be included as per the Guidelines/SOPs issued by GASAB. All major minerals namely Coal, Limestone, Copper, Diamond, Bauxite, Manganese, Iron Ore and Rock Phosphate as preferred by the State Government were selected for the project.

5.1.2 Objectives

The objectives are as follows:

- To prepare the Asset Account of mineral and energy resources of the State for better monitoring of resource extractions, usage, contain illegal mining and revenue optimization in the interest of the State.
- To assist the country/State in attaining the international commitment on becoming SEEA framework compliant and for effectively mapping the SDG indicators.
- To assist the policy makers with comprehensive data-set on availability, usage and sustainability of mineral for evidence based decision making.
- To provide inputs for monitoring the progresses towards national commitment made at the COP 26 on increase in generation and usage of renewable energy resources.

5.1.3 Methodology of data collection and compilation of physical flows

- As per *Concept Paper on Natural Resource Accounting in India* shared by office of the Comptroller and Auditor General of India in September 2020, A&E offices collected and compiled the data from the respective departments governing the resources in the states and Audit offices would liaise with state departments to validate the data before finalization of the Asset Accounts.

- As per guidelines a Joint Team from Audit & Accounts Office was constituted in October 2021 for the purpose of data collection and preparation of Asset Accounts in respect of Mineral & Energy Resources.
- At the beginning, the Joint Team visited the Directorate of Geology & Mining Department (Apex Level Unit) for collection of data, but the requisite data/information was not readily available in Directorate office.
- Thereafter, in view of importance of the work of National interest, it was decided to constitute more Joint Teams (Ten Joint Teams) and deployed them at every grassroot level unit (at all 52 DMOs) for the collection of data.
- Each Joint Team was assigned responsibility for collection of data from four to six DMOs.
- After visiting the grassroot level unit Joint Teams observed that data was also not readily available with DMOs as per requirement of the Asset Accounts.
- Subsequently, virtual training for collection of requisite data/information from available sources was planned and organized for the officials of grassroot level unit as well as for Joint Teams.
- Only proved resources as available on 1 April 2015 with DMOs were taken as opening stock in the Asset Accounts. This opening stock was adjusted with the extraction of resources and new stock added during the period 2015-16 to 2019-20 to arrive at the closing stock of reserves for the year 2019-20, which served as the opening stock of the reserves for the year 2020-21.

5.1.4 Methodology of monetisation of physical flows

For the purpose of calculation of royalty receivable and market value on reduction of resources, dispatched quantity has been taken into consideration. Rates of Royalty have been provided either on ad valorem basis or specific rate per tonne/kg basis. Royalty rate prevailing as on 31 March 2021 have been considered for valuation of royalty receivable in Table 3. In case of royalty chargeable on ad valorem basis i.e. on Sale price or sale value, the Average Sale Price (ASP) of minerals/metals issued by IBM as on 31 March 2021 or sale price issued by State Government have been considered.

The methodology for calculation of royalty receivable for the minerals included in Asset Accounts is mentioned below the para in a table. Limitations are there in determining the royalty receivable on Opening, Addition and Closing reserves due to uncertainty of grades/category of ores to be extracted. In such instances average prices of all grades have been considered in valuation.

Similar methodology for valuation of market value of opening, closing, extractions and additions of reserves has been adopted for calculating average market value. Usually, these rates vary from district to district based on availability of minerals in that district, distance from the nearest site etc. In case of various rates prevailing in districts, similar rates appearing in more than one district have been considered for valuation of average market value.

5.1.5 Dual stage validation and limited verification of data

As envisaged in the Concept Paper and also in the Guidelines/Standard Operating Procedures (SOPs), the data appearing in the Asset Accounts was validated initially by the DGM, Government of Madhya Pradesh and then verified in limited manner by the Office of the Accountant General (Audit-II) Madhya Pradesh, Bhopal.

5.1.6 Challenges and limitations

- Non availability of requisite data at apex level as well as grassroots level units was big challenge for initiation and preparation of Asset Accounts.
- Data was also not readily available in the desired format, Joint Teams with the co-operation of grassroots level officials, prepared the data from various records available with them.
- Compilation of data collected from all 52 DMOs and verification of the same with respective records was also a challenging task for AsG office.
- Covid infections was also acted as a big hindrance during the data collection as most of the members of the Joint Teams had infected during visit of various grassroots level units.
- Data collection consumed lot of man-days which affected the regular work of field offices.
- Sustainability of the minerals has been calculated on the basis of extraction of minerals during 2020-21.

5.2 Asset Accounts on Mineral & Energy Resources

5.2.1 Highlights

The Accounting format as suggested in SEEA (CF) along with the country specific needs were adopted for reporting of availability, extraction and addition of resources. Some of the inferences from the Asset Accounts are mentioned below:

- Madhya Pradesh is the sole producer and stock bearing state of Diamond in the country. As on 31st March 2021, closing stock of the Diamond was 7,68,622.46 carat.
- Madhya Pradesh is the largest stock bearing State of Copper Ore and Manganese Ore with 70% and 53% respectively in the country.
- Madhya Pradesh is also the largest extractor of Copper Ore with 2.24 million tonne in total output of the country.
- Analysis of the Asset Accounts points the sustainability of the resources ranging from 15 year to 142 years. The sustainability of the Diamond, most precious mineral is estimated to be 56 years at the present rate of extraction on the available reserve.
- During the year 2020-21 there was addition to stock of Copper and Limestone of 0.90 and 590.45 million tonne respectively.
- Renewable Energy was generated 12.84 *per cent* of total Energy during the year 2020-21.
- As on 01.04.2020, opening stock of Diamond was 782295.87 carat. There was no addition to stock during the year but reduction of 13673.41 carat was noticed due to extraction during the year under government sector.
- As on 01.04.2020, opening stock of other major minerals except Diamond was 3054.15 million tonnes. 600.48 million tonnes minerals were added in the stock during the year whereas, reduction of 62.73 million tonnes were noticed due to extraction during the year, 8.51 million tonnes under government sector and 52.93 million tonnes under private sector.
- 2.24 million tonnes of copper ore was extracted during the year which was the largest quantity of extraction in the country and the entire quantity was extracted under the private sector.

The Asset Accounts for the year 2020-21 is depicted in Table 1 to 6.

- Table 1 intends to capture the basic details of Opening Stock, Addition, reduction and Closing Stock of the resources for the year 2020-classified under different heads as per the SEEA (CF) framework.

Natural Resource Account of Madhya Pradesh

- Table 2 is the Asset Accounts on physical flows of Mineral and Energy Resources along with sustainability of resources. This Table is the extension of Table 1 with further segregation of the sustainability of the resources taking into factor of current rate of extraction and available resources.
- As riverine mineral resources have not been shortlisted during the year 2020-21, therefore Table 2(A) and Table 2(B) are not included in the Asset Accounts 2020-21.
- Table 3 is the Subsidiary Asset Accounts linking detailed physical flows in respect of Mineral and Energy Resources with the valuation of resources.
- Table 3A is showing information on illegal mining.
- Table 4 exhibits the analysis of extraction, production and dispatch of resources in terms of raw ores and finished products at mine head. As State Government has not maintained the information of extraction, therefore information of dispatch has been considered as extraction during preparation of Asset Accounts.
- Table 5 depicts analysis of district mineral foundation money actually received and money realisable as per the actual extractions during the year.
- Table 6 states the progress in generation and use of renewable energy resources the generation of non-renewable/fossil energy.

5.2.2 The Asset Accounts

TABLE-1									
Basic asset account on Mineral & Energy Resources									
Particulars	Names of resources								
	IRON ORE (in MT)	MANGANESE (in MT)	LIMESTONE (in MT)	COPPER (in MT)	DIAMOND (in Carat)	ROCKPHOSPHATE (in MT)	COAL (in MT)	BAUXITE (in MT)	
Opening stock of environmental asset	56.19	59.22	2135.38	107.77	782295.87	14.04	661.43	20.12	
Growth in stock	1.25	1.73	590.45	0.9	0	0	1.29	4.85	
Discoveries of new stock	-	-	-	-	-	-	-	-	
Upward reappraisals	-	-	-	-	-	-	-	-	
Reclassifications	-	-	-	-	-	-	-	-	
Total addition of stock	1.25	1.73	590.45	0.9	0	0	1.29	4.85	
Reduction of stock									
Extractions	3.61	0.68	26.77	2.24	13673.41	0.1	28.52	0.8	
Normal loss of stock	-	-	-	-	-	-	-	-	
Catastrophic losses	-	-	-	-	-	-	-	-	
Downward reappraisals	-	-	-	-	-	-	-	-	
Reclassification	-	-	-	-	-	-	-	-	
Total reduction in stock	3.61	0.68	26.77	2.24	13673.41	0.1	28.52	0.8	
Valuation/Revaluation of the stock* (valuable actual market price) – as in table	-	-	-	-	-	-	-	-	
Closing stock of environmental assets	53.83	60.27	2699.06	106.43	768622.46	13.94	634.2	24.17	

TABLE-2									
Showing Asset Accounts on Physical Flows of Mineral and Energy Resources for the Year 2020-21									
Classification	Sub-classification (illustrative only and may vary from state to state and Union)	Opening Stock of proved reserves	Additional to stock	Reduction in Stock				Closing stock of proved reserves	Sustainability of resources in years *
				Extracted by/for use in			Total extraction		
				Govt Sector	Private Sector	Other extractions			
Major Minerals	IRON ORE (In MT)	56.19	1.25	0	3.61	0	3.61	53.83	14.92
	MANGANESE (In	59.22	1.73	0	0.68	0	0.68	60.27	88.02
	LIMESTONE	2135.38	590.45	0.02	26.76	0	26.77	2699.06	100.81
	COPPER (In MT)	107.77	0.9	0	2.24	0	2.24	106.43	47.53
	DIAMOND(In Carat)	782295.87	0	13673.41	0	0	13673.41	768622.46	56.21
	ROCKPHOSPHATE	14.04	0	0	0.1	0	0.1	13.94	142.41
	BAUXITE (In MT)	20.12	4.85	0	0.8	0	0.8	24.17	30.15
Fossil fuel	COAL (In MT)	661.43	1.29	8.49	18.74	0	28.52	634.2	23.29
* Sustainability is calculated on last year production basis									
Disclaimer:- No. of mines included for Iron Ore is 22, for Managanese is 16, for Limestone is 168, for Copper is 1, for Diamond is 1, for RockPhosphate is 30 and for Coal is 54.									

For the year 2020-21

TABLE-3												
Subsidiary Asset Accounts linking detailed physical flows in respect of mineral and Non-renewable Energy resources with the valuation of resources												
Particulars	Name of minerals- with grades(wherever available)	Physical Unit (in tonnes/cum) showing Govt,private and other sector	Physical unit extracted showing Govt., Private and other Sector			Total	Valuation of resources (to be worked out only for the extraction during the year)					
			Govt. sector	Private sector	Other		Revenue Receivable (in crore) showing Govt., Private and other sector				Total revenue receivable	Average Market value (as ascertained form IBM or State Statistical Department)
							Govt. sector	Private sector	Other	Total		
Opening Stock/availability of resources at the beginning of the year (2020-21)	Fuel Minerals											
	COAL	MT	264.58	375.70	0.00	661.43						
	Major Minerals											
	IRON ORE	MT	0.00	56.19	0.00	56.19						
	MANGANESE	MT	0.00	59.22	0.00	59.22						
	LIMESTONE	MT	0.18	2135.20	0.00	2135.38						
	COPPER	MT	107.77	0.00	0.00	107.77						
	DIAMOND	CARAT	782295.87	0.00	0.00	782295.87						
	ROCKPHOSPHATE	MT	9.09	2.46	0.00	14.04						
	BAUXITE	MT	0.12	20.01	0.00	20.12						
Additions during the year:	Fuel Minerals											
Growth in Stock	COAL	MT	1.29	0.00	0.00	1.29						

[illegible]

[illegible]

TABLE-3A						
Table showing information on illegal mining						
Name of the district	Authority which detected the offence (deptt/police/enforcement/others)	Detection of illegal mining by the departmental authorities on which challans issued and offence report registered				
		Name of minerals with grades (if available)	Physical quantity/volume	Revenue involved	Amount recovered	Provisions under which compounding done
Agarmalwa	Mining	Murum	187.33	234163	234163	
	Mining	Sand	135.87	659095	659095	
Alirajpur	Mining	Sand	334.61	913894	913894	
	Mining	Murum	6448.3	8060375	8060375	
	Mining	Soil	18060	27090000	0	
Anuppur	Mining	Coal	3	90000	0	
Ashoknagar	Mining	Murum	125	156250	6250	
	Mining	Sand	627	713125	88125	
Badawani	Mining	Sand	414	1349150	606875	
	Mining	Murum	1957	2559000	303500	
Balaghat	Mining	Magnese	2.32	102242	102242	
Datia	Mining	Soil	5915	7993750	18750	
	Mining	Sand	6	66000	0	
	Mining	Murram	90	112500	112500	
Burhanpur	Mining	Sand	6	15000	15000	
	Mining	Murram	36	54000	54000	
Chattarpur	Mining	Blank	2072	2600500	100500	
	Mining	Blank	900	1125000	0	
	Mining	Blank	183.8	253750	214000	
	Mining	Blank	226000	688020000	0	
	Mining	Sand	84458.568	390427050	2677400	
Chindwara	Mining	Sand	655359	4095705881	293750	
	Mining	Murram	10352	15404938	620938	
Dewas	Mining	Murum	84	120000	120000	
	Mining	Sand	87	459375	459375	
Dhar	Mining	Blank	307	15350	383750	
	Mining	Mitti	36	1800	45000	
Dindori	Mining	Boulder	231.836	301046	245663	
	Mining	Murum	2831.93	167650	167650	
	Mining	Sand	5474	33953125	203125	
Gwalior	Mining	Bolder	689700	20610500	0	
	Mining	Murum	795800	198950000	0	
	Mining	Sand	11500	512500	512500	
	Mining	Soil	34100	990500	162500	
	Mining	Stonedust	2100	52500	52500	
Harda	Mining	Murum	349	523800	0	
	Mining	Sand	470	1143750	50000	

	Mining	Soil	194	291600	0	
Indore	Mining	Murum	39659	8821000	1354750	
Jhabua	Mining	Mangnese	50	500000	500000	
	Mining	Murum	164.5	205625	205625	
	Mining	Sand	13.2	41250	41250	
Katni	Mining	Bauxide	25	83905	83905	
	Mining	Murum	4064.97	7002500	1242500	
Khandwa	Mining	Murum	4663.336	2437625	778820	
	Mining	Sand	63	10048	160000	
	Mining	Soil	65.457	81825	0	
Khargone	Mining	Sand	1448.37	7575520	2515520	
	Mining	Murum	5567	1388000	1388000	
Mandsaur	Mining	Murum	5687	1538000	1388000	
	Mining	Sand	145.4	523125	215625	
	Mining	Shale	85	130000	130000	
	Mining	Soil	1632	864000	849000	
Hoshangabad	Mining	Gitti	30	90000	0	
	Mining	Sand	4076.77	12713938	4572563	
	Mining	Shale	20	30000	30000	
	Mining	Soil	17237.96	21547450	0	
Morena	Mining	Murum	4885.88	6107350	0	
	Mining	Soil	7894	11841000	405000	
	Mining	Gitti	6	21600	21600	
	Mining	Khenda	20	72000	72000	
Niwari	Mining	Murum	6000	0	750000	
	Mining	Stone	35	0	103975	
	Mining	Sand	163956.5	0	575836156	
Panna	Mining	Doka stone	7	10500	0	
	Mining	Flag stone	1766.8	22268400	0	
	Mining	Gitti	100	150000	0	
	Mining	M-sand	160	480000	0	
	Mining	Murum	188.84	277010	97010	
	Mining	Sand	171427.3	26386250	1205500	
Rewa	Mining	Flag stone	19.79	189000	0	
	Mining	Laterite	6426.04	0	105850	
	Mining	Murum	1949	0	26250	
	Mining	Soil	939.5	0	120000	
	Mining	Stone	1654.6	0	244250	
Sagar	Mining	Bolder	100	360000	360000	
	Mining	Murum	6670	10005000	495000	
	Mining	Sand	201	1004688	1004688	
	Mining	Soil	284.4	0	37260	
	mining	Soil/murum	10.3	12875	12875	
	Mining	Laterite	6426.04	0	105850	
	Mining	Murum	27230	37921500	26250	
	Mining	Soil	939.5	0	120000	
	Mining	Stone	1654.6	0	244250	
Sehore	Mining	Soil	284.4	0	37260	
	Mining	Boulder	48960	73440000	0	

Natural Resource Account of Madhya Pradesh

	Mining	Murum	87754	126241000	241000	
	Mining	Sand	1179	1848500	251000	
Sheopur	Mining	Soil	3021.74	4530610	31000	
	Mining	Stone boulder	33	47500	47500	
Shajapur	Mining	Murum	47.36	4800	4800	
	Mining	Sand	170	250000	25000	
Shahdol	Mining	Blank	716	1638750	1638750	
	mining	Gitti	42	198000	198000	
	Mining	Murram	772.67	1049005	590500	
	Mining	Stone	9	37500	37500	
Sidhi	Mining	Coal	6	383040	383040	
	Mining	Sand	40	200000	200000	
Singrauli	Mining	Murum	637	972375	264375	
	Mining	Sand	96	310000	310000	
	Mining	Soil	150	100000	100000	
Shivpuri	Mining	Boulder	1.5	100000	100000	
	Mining	Sand	286.67	896704	896704	
	Mining	Stone boulder	12.31	38930	38930	
Seoni	Mining	Murum	710.69	906875	906875	
	Mining	Sand	69.1	231250	221250	
Tikamgarh	Mining	Murum	6371	62500	849000	
	Mining	Stone	50	0	62500	
Umariya	Mining	Murum	36048.4	55000100	60500	
	Mining	Sand	83308.16	15967269	618125	
	Mining	Soil	6355.89	8770120	96000	
Mandla	Mining	Murum	578	138250	157500	
	Mining	Sand	310.5	155250	930313	
	Mining	Stone	9	30000	30000	
Narsinghpur	Mining	Sand	3063	19126500	10000	
	Mining	Soil	220	285000	225000	
Shivpuri	Mining	Blank	87900	75600000	0	
	Mining	Sand	1526.5	1215625	1050000	
Jabalpur	Mining	Dolomite	9.2	47628	47628	
	Mining	Gitti	116	296100	296100	
	Mining	Iron ore	61670	18097140	0	
	Mining	Murum	751	926750	905250	
	Mining	Sand	833336	7275000	1125000	
	Mining	Soil	5155	6773750	18750	
Vidisha	Mining	Blank	15	45000	12045000	
	Mining	Boulder	410733	718782720	0	
	Mining	Blank	5317.5	1332000	0	
	Mining	Farsi Pathar	12	126000	0	
	Mining	Blank	37560	90000	90000	
	Mining	Murum	16846	25269000	45000	
	Mining	Murum	2250	3375000	0	
	Mining	Sand	53090.1	84432525	1702825	
	Mining	Unknown		4572551	0	
Total			4850187.307	6945706760	641220717	

TABLE-5						
Collection of District Mineral Foundations						
S.No.	District Name/Name of Mines and address/Name of Mineral	Volume of Minerals on which DMF was realisable	Rate at which DMF realisable	Total DMF realised	Variations if any in Rs / Percentage	
1	AGAR	Every holder of a mining lease or a prospecting licence-cum- mining lease shall, in addition to the royalty, pay the District Mineral Foundations (DMF) of the district in which the mining operation are carried on.	With respect to major mineral ten percent to royalty paid in respect of mining leases, prospecting-cummining lease granted on or after 12 th January, 2018 and thirty percent of the royalty paid in respect of mining lease granted before 12 th January, 2018.	268124	-	-
2	ALIRAJPUR			735304	-	-
3	ANUPPUR			126672961	-	-
4	ASHOKNAGAR			1012456	-	-
5	BALAGHAT			40362841	-	-
6	BARWANI			885883	-	-
7	BETUL			24669367	-	-
8	BHIND .			3134496	-	-
9	BHOPAL			2014530	-	-
10	BURHANPUR			245147	-	-
11	CHHATARPUR			30469953	-	-
12	CHHINDWARA			127390948	-	-
13	DAMOH			79686	-	-
14	DATIA			2498795	-	-
15	DEWAS			1689227	-	-
16	DHAR			68095583	-	-
17	DINDORI			612360	-	-
18	GUNA			1186429	-	-
19	GWALIOR			15770105	-	-
20	HARDA			212900	-	-
21	INDORE			1953366	-	-
22	JABALPUR			85595427	-	-
23	JHABUA			4899667	-	-
24	KATNI			112480651	-	-
25	KHANDWA			2279134	-	-
26	KHARGONE			1109544	-	-
27	MANDLA			4257036	-	-
28	MANDSAUR			2551659	-	-
29	MORENA			2777610	-	-
30	NARMADAPURAM			65350	-	-
31	NARSINGHPUR			1692961	-	-

Natural Resource Account of Madhya Pradesh

32	NEEMUCH	58037186	-	-
33	PANNA	1726314	-	-
34	RAISEN	2362342	-	-
35	RAJGARH	765884	-	-
36	RATLAM	3396595	-	-
37	REWA	4798097	-	-
38	SAGAR	4214905	-	-
39	SATNA	436580991	-	-
40	SEHORE	1573293	-	-
41	SEONI	2996633	-	-
42	SHAHDOL	104616230	-	-
43	SHAJAPUR	652963	-	-
44	SHEOPUR	20455	-	-
45	SHIVPURI	1150162	-	-
46	SIDHI	18740731	-	-
47	SINGARAULI	419662167	-	-
48	TIKAMGARH	12824759	-	-
49	UJJAIN	1790413	-	-
50	UMARIA	72015373	-	-
51	VIDISHA	1533137	-	-
	Grand Total	1817128130	-	-

TABLE-6

Progress in generation and use of renewable energy resources

Sector	Energy requirement by sector during the year (in MWH/GWH)	Total energy requirement in the State(in MWH/GWH)	Generation/additional generation of energy during the year (in MWH/GWH)						Percentage share of non-renewable and renewable energy resources vis-à-vis total requirement	Renewable energy	Energy surplus or deficit including total MWH/GWH of deficit/ surplus power
			Non-renewable (N/R) energy/Fossil fuel sources (MWH/GWH)	Renewable energy							
				Solar	Wind	Hydel	Others incl Bio Mass, Waste to energy, Geothermal etc	Total			
1	2	3	4	5	6	7	8	9	10	11	12
Industries	10596	83645	67131	4557	4924	526	730	10737	80.26	12.84	-5777
Domestic	16805										
Agriculture	25438										
Commercial	3894										
Public Lighting and water works	2094										
SEZ	435										
T&D Losses	22081	504									
Traction and Railways	1798										
other	504										
Disclaimer:	1. Data in column 5, 6, 7, 8 has been taken from new and renewable energy department. 2. Data in column 2, 3, and 4 has been taken from data of energy department.										

5.2.3 Findings of the study

Lease wise information was not provided by the DGM office whether lease is operative or inoperative.

Asset Accounts has been prepared on the basis of information received form the State Government. Differences has been noticed between the information about dispatch of minerals provided by State Government and Indian Bureau of Mines (IBM-Nagpur) as under: -

Minerals	Data as Supplied by State Government	Data as per provided by IBM	Differences
DIAMOND	13673.41 Carat	*	*
BAUXITE	0.80 MT	0.58 MT	0.22 MT
MANGANESE	0.68 MT	0.78 MT	-0.10 MT
COPPER	2.24 MT	*	*
ROCKPHOSPHATE	0.10 MT	0.09 MT	(-) 01 MT
IRON ORE	3.61 MT	4.53 MT	(-) 0.92 MT
LIME STONE	26.77 MT	45.71 MT	(-) 18.94 MT
COAL	28.52 MT	**	
* As per information provided, data is not available with IBM.			
** Data not provided by IBM.			

As the grade wise details of minerals were not available with DMOs/DGM, therefore, it was not depicted in the Asset Accounts.

Lease wise information of extraction/production, sale, royalty, dead rent, surface rent and others due receivable were not being maintained at DGM level.

Opening balances and average market value of major and minor minerals are not being maintained at DGM level.

Specific information about the riverine minerals was also not available with the DMOs, therefore, riverine minerals are also not included in the Asset Accounts 2020-21.

Information regarding extractions permitted for minerals during the year was not available at DMO level.

District wise and mineral wise data of monthly production and dispatch of minor minerals by the quarry lease holders of the entire State is not being maintained at DGM for compiling the data for preparation of Asset Accounts.

Separate Detail and Sub-detail heads are not available in the State budget to capture Mineral wise information on royalties, penalties, consultancy charges, application fees, dead rent, surface rent etc.

Geo-fencing of all mines area is not undertaken by the State Government till 2022-23

Specific information about the minor minerals was not available even at DMOs level, therefore, minor minerals are not included in the Asset Accounts 2020-21.

Information regarding DMF realisable is not available with DGM.

5.2.4 Recommendations

Making provisions for regular review of inoperative leases at fixed intervals for determining the leases, which have been inoperative for more than the permissible time limit to prevent blockage of mining areas.

Annual/Monthly returns of the minerals as prescribed by MMDR Act may be shared with State government along with IBM by all the Lessees. The Lessees and DGM may check and reconcile the differences in figures, if any, on monthly basis with IBM. A system may be established to ensure that all lease holders submit their monthly returns to DGM so that the data can be captured in entirety and the variation between the IBM and State figure can be minimized.

Grade-wise details of production of minerals may be properly maintained as required vide MCDR, 1988 as amended.

Lease wise information of extraction/production, sale, royalty, dead rent, surface rent and others due receivable data may be updated by the DGM.

Opening balances and average market value of major and minor minerals may be updated and maintained regularly.

Details of physical flow and valuation of riverine minerals may be regularly obtained from the Revenue and Forest Department for inclusion in the Asset Account.

Reporting mechanisms should be established for all minerals to keep check on extraction of minerals against the permitted extractions during the year.

District and mineral wise data of monthly production and dispatch of minor minerals by the quarry lease holders of the entire State should be maintained at DGM level on periodic basis for further facilitation for compiling the data for preparation of Asset Accounts.

Separate Detail and Sub-detail heads may be opened in the State budget to capture Mineral wise information on royalties, penalties, consultancy charges, application fees, dead rent, surface rent etc.

Since, the receipts from mining activities constitute a substantial portion of the State revenue, it is recommended that the State Government may undertake geo-fencing of all mines area within a fixed time frame to ensure effective monitoring of mining activities and also maximizing the revenue.

The methodology for assessment of the opening reserves of the minor minerals except the minerals which were classified as major minerals prior to February 2015 is required to be determined by the State Government for its Inclusion in the Asset Accounts in phase wise manner.

The DMF task should be managed more efficiently to ensure assessment of DMF realisable for a closer look on the DMF realized.

CHAPTER 6

FUTURE CONTINUITY PLAN

6.1 Guidelines/SoPs issued by GASAB

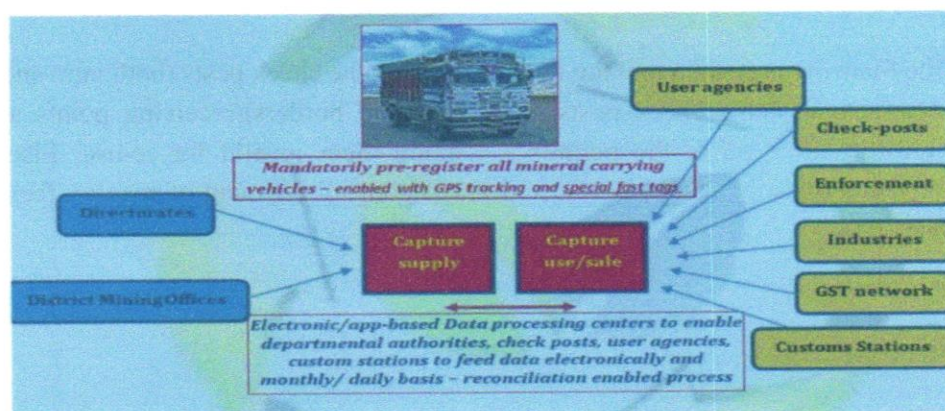
Asset accounting process for Mineral and Energy Resources is to be a continuous process now onwards. Hence, there is a need for instituting systems and procedures for regularly capturing the data on physical flows of resources, while other inputs like addition in stock, average revenues, market prices, extractions not approved by the DGM and subsequently detected by various agencies could be collected from different sources while finalizing the Asset Accounts.

GASAB has issued Guidelines/SoPs in June 2022 suggesting methodologies for quarterly reporting framework and novel initiative of mapping the supply and use of resources. These will ensure timely collection and collation of data for the Asset Accounts. The mapping of supply and use of resources will enable 360 degrees profiling of mineral extraction and their use for effective management and optimisation of resources for the State exchequer. These are discussed in the succeeding paragraph.

6.2 Need for mapping the supply and use/sale/export

Revenues from minerals and non-renewable energy resources consists of substantial part of State's receipt and largely help the entities welfare fund and other planned activities of the States. Hence, it is imperative to implement cross-verification mechanism to prevent misuse of resources and optimize revenue yields from exploitation of minerals. A robust framework must be put in place to ensure zero tolerance on resource and revenue pilferage.

A suggested mechanism for enhancing the control measures for optimizing monitoring on resource sale/use/consumption for better resource management and revenue yields to be adopted as per the following flowchart:



Source: GASAB

The DMG agreed to furnish the data as envisaged in the guidelines circulated by GASAB and issued a memo to all ADMGs to furnish the required information and required change management in e-permit system is in process.

6.3 Quarterly Reporting Framework.

From the April 2022, the quarterly reporting framework for Asset Account on Minerals and Energy Resources has to be implemented as suggested by the GASAB.

The DMG has agreed to implement the quarterly reporting framework for the Asset Account from April 2022. Prescribed formats have been circulated to ADMG Offices to submit their information on asset account on quarterly basis to DMG.

At present, the DMG will collect the information from all ADMG Offices and submit the quarterly report to AG office manually. A meeting was held with Joint Director, DMG and all the points were discussed in detail for the preparation of Asset Account for the year 2021-22 and report for quarter ending June 2022. The department has assured their full co-operation in this regard.

6.4 Recommendations for improving management of mineral and energy resources of the State and optimization of revenue yields therefrom.

The following approaches are recommended to make the system robust and inclusive in the best interest of conservation, sustainability of resources and optimisation of revenues for the State exchequer.

a) Statutory approach

The State as part of enhanced statutory controls over mining activities, extractions/ productions/ dispatch and revenue yields should automate the e-permit system, with bar-coding of permits real time information sharing on permits issued pre-registration, GPS tagging of carriage vehicles with unladen weight and special fast tags for easy monitoring of minerals carried at the weigh bridges.

The State may consider making it mandatory for the check posts (both intra and inter-State/customs check posts at international borders)/receiving points at industries to e-verify the permits – making them invalid for re-use. Else, movement/receipt should be allowed only upon full payment of royalty, fees, fines, etc.

The State may consider enacting laws for making the lease holders/their personnel, departmental officials, industries/their personnel authorised to receive produces - personally liable for recovery of royalty, fees, fines, etc., in cases of movement/acceptance/consumption of minerals without valid permits/multiple use of permits. Also, enhancing the nature and quantum of penal measures to act as high deterrent on illegal mining activities.

The State may consider introducing rewards scheme in the lines as prevalent in Central Excise and Customs Department for suitably rewarding the informers/Officers/whistle blowers leading to detection of illegal mining.

b) Other approach:

The following could consist of the probable steps (in addition to those taken/being taken by the States) leading to a complete monitoring mechanism on usage/sale of mineral produces.

Statutory interventions for ensuring strict monitoring on permitted mining activities and deterring illegal mining and their sale/use as discussed under statutory approach.

Mapping the contact points through which minerals are passed within and outside the State/country, user agencies, consuming industries and wholesale/bulk selling points (getting them registered similar to the practice in Forest Department to register the sawing mills).

Establishing seamless flow of information from these sources to the Directorates managing the resources on usage and sale of resources and their continuous validation vis-à-vis the e-permit system.

Installing systems for automated verification mechanisms as above to raise red flags on unauthorised supply/consumption of minerals – issuing notice for further action.

For further detail recommendation in Chapter VII of compendium of Asset Accounts on Mineral and Energy Resources released by GASAB in October 2022 may be referred (<https://gasab.gov.in/gasab/pdf/Compendium-of-Asset-final.pdf>)

c) Need for GPS/geo-tagged district-wise mineral maps

The GPS/geo-tagged district-wise mineral map would help in consolidation at the national level for providing precise data on availability of resources across the country along with their pace of extractions, revenue generations, market values, available stock of resources. Mine and Resource wise collection of GPS

co-ordinates will help in creation of resource-wise maps by each States with mine indicators as per their GPS co-ordinates.

Gradually, other data sets like that of Indian Bureau of Mines, Directorate of Hydrocarbons, etc. could be possible to be mapped into these GPS enabled mapping system for resources. Requisite mapping could be enabled navigating the readers to the latest Asset Accounts providing information on total stock of resources in the district, annual extraction, revenue realised, and other details captured through our Asset Accounting processes in the districts and compiled State-wise. State of Maharashtra has prepared district wise mineral map with GPS/geo-tagged.

Annexure- A

Constitution of NRA Cell (details from each stakeholder)

Name of Office	Name (Sri/Smt)	Nominated Post	E-mail ID	Remark
O/o AG (Audit-II), MP, Bhopal	Bhushan Balkrishna Bhirud	DAG/A MG-III	bhirudbb@cag.gov.in	Nodal Officer for O/o AG (Audit-II)
	Pramod Kumar Singh	Sr AO FINAT	singhpk.mp1.sca@cag.gov.in	Core cell member
	Dileep Kumar	AAO FINAT	dileepk.mp1.sca@cag.gov.in	Core cell member
	Pratipal Singh	AAO FINAT	pratipals.mp1.au@cag.gov.in	Core cell member
	Deepesh Tekchandani	Sr AO FINAT	deepesht.mp2.au@cag.gov.in	Forest
	Lukesh Kumar	AAO AMG-I	lukeshk.mp2.au@cag.gov.in	Forest
	Arvind Jain	AAO AMG-III	arvindj.mp2.au@cag.gov.in	Mining
O/o PAG (Audit-I), MP, Gwalior	Vijay Sugandhi	Sr AO AMG-IV	sugandhiv.mp1.sca@cag.gov.in	Water resources
	Ankush Gupta	AAO AMG-IV	ankushg.mp1.au@cag.gov.in	
	Manjula R. Krishnan	Sr. AO AMG-V	manjulark.mp1.sca@cag.gov.in	Land Records
	Manoj Parihar	AAO AMG-V	pariharmk.mp1.sca@cag.gov.in	
O/o PAG (A&E-I), MP, Gwalior	A.K. Tiwari	Sr AO Book Section	tiwariak.mp1.ae@cag.gov.in	A&E office
	A.N. Shukla	Sr AO Report Section	shuklaan.mp1.ae@cag.gov.in	
	Anand Gadkari	Sr AO TM Section	gadkaria.mp1.ae@cag.gov.in	
	Manish Valecha	AAO TM Section	manishvalecha.mp1.ae@cag.gov.in	
	Vishal Tomar	AAO Report Section	vishalt.mp1.ae@cag.gov.in	
	Deepak Kumar	AAO	deepakk.mp1.ae@cag.gov.in	

		Book Section		
	Saurabh Kuamr Sachan	AAO VLC Section	saurabhks.mpl.ac@cag.gov.in	
Name of Office	Name (Sri/Smt)	E-mail ID		Remark
Governme nt of Madhya Pradesh (Constitute d vide notificatio n no. 728/R- 734/2020/ B-1/FD- IV, 17th August, 2021 of Finance Departmen t of MP)	Lokesh Kuamr Jatav IAS	ctamp@mptreasury.gov.in		Chairperson
	Ashutosh Tiwari	ashutosh.tiwari83@mp.gov.in		Member
	Gyan Prakash Soni	eincbodhi@gmail.com		Member
	Sanjay Shukla	apccfit@mp.gov.in		Member
	Rajendra Kumar Jain	rajendra1607.jain@gmail.com		Member
	Vinod Bagre	Geology.dgm@mp.gov.in		Member
	Ashok Kumar Malviya	a.malviya@mp.gov.in		Member

Natural Resource Account of Madhya Pradesh

2021

File No.No./Finat/2020-21/NRACell/F-103

**Office of the Accountant General (Audit-II), Madhya Pradesh,
Bhopal, Branch-Gwalior**

No./FINAT/NRA/2020-21/

Date-24/09/2021

To

Director General/GASAB-II

Office of the Comptroller and Auditor General of India
10, Bahadur Shah Zafar Marg
New Delhi-110124

Subject- Constitution of NRA Cell regarding.

Reference- Hqrs email dated 26th August, 2021.

Sir,

Kindly refer to the Hqrs email dated 26/08/2021 on the subject cited above. In compliance of the Hqrs letter No.911/dated 08/09/2020, NRA Cell has been constituted in the State of Madhya Pradesh vide notification no. 728/R-734/2020/B-1/FD-IV, 17th August, 2021 of Finance Department. Officials are also nominated for the same from Office of AsG (Audit) & (A&E) for co-operation with representatives from the State Government. Details of nominated officials from each stakeholders are enclosed herewith for your kind perusal.

This issues with the approval of Accountant General.

Yours sincerely,

Enclosed- As above

Bhushan Balkrishna Bhirud
Dy. Accountant General
AMG-III

End. No./FINAT/NRA/2020-21/

Date-24/09/2021

Copy forwarded for information and necessary action :

1. Additional Chief Secretary, Finance Department, Govt of MP, Vallabh Bhawan Bhopal
2. Principal Accountant General (A&E-I), MP, Lekha Bhawan, Gwalior
3. Principal Accountant General (Audit-I), MP, Audit Bhawan, Gwalior

Bhushan Balkrishna Bhirud
Dy. Accountant General
AMG-III

MADHYA PRADESH GOVERNMENT
FINANCE DEPARTMENT
Notification
The 17th August, 2021

No. 728 /R-734/2020/B-1/FD-IV ---- The Governor of Madhya Pradesh is pleased to constitute a Natural Resource Accounting (NRA) Cell for providing the information on the state of natural resources.

Natural resource accounting cell will compile the data relating to natural resources within an accounting framework. Natural Resource Accounting (NRA) is an accounting system that deals with stocks and stock changes of natural assets, comprising biota (produced or wild) subsoil assets (proved reserves), water and land with their aquatic and terrestrial ecosystems. NRAs may involve both physical units and monetary values. The resources in question may include both those which contribute to marketable forms of production as well as non-commercial or environmental resources such as air, water and biological life. NRAs are regarded as a means of creating linkages between the environment and economy.

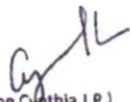
The Natural Resource Accounting (NRA) Cell shall constitute of the following members:-

Sr.No.	Particulars	Departments	Description	Contact
1	Mr. LOKESH KUMAR JATAV, IAS Commissioner Treasuries and Accounts, Madhya Pradesh PARYAWAS BHAWAN, BHOPAL	Finance Department	Chairperson (ex-officio)	Phone: 0755-2676020 Email: ctamp@mptreasury.gov.in
2	Mr. ASHUTOSH TIWARI Assistant Superintendent of Land Records (Office Commissioner Land Records & Settlement, Madhya Pradesh)	Revenue Department	Member	Mobile: 9891517418 Email: ashutosh.tiwari83@mp.gov.in
3	Mr. Gyan Prakash Soni CHIEF ENGINEER, BODHI, Bhopal (CE (BODHI) Bhopal)	Water Resources Department	Member	Mobile: 9425358281 Email: elncbodhi@gmail.com
4	Mr. Sanjay Shukla Additional Principal Chief Conservator of Forests (Information Technology), Madhya Pradesh, Bhopal	Forest Department	Member	Mobile: 8959996930 Email: apccfit@mp.gov.in
5	Dr. Rajendra Kumar Jain Senior Scientific Officer EPCO (The Environmental Planning & Coordination Organisation BHOPAL)	Environment Department	Member	Mobile: 9926584737 Email: rajendra1607.jain@gmail.com
6	Mr. Vinod Bagre Superintending Geologist	Mining Department	Member	Mobile: 9425014339 Email: geology.dgm@mp.gov.in
7	Mr. Ashok Kumar Malviya Under Secretary to Govt. of Madhya Pradesh	Department of Planning, Economic & Statistical Analysis	Member Secretary	Mobile: 70007988728 Email: a.malviya@mp.gov.in

2. The headquarter of the Natural Resource Accounting (NRA) Cell shall be in Bhopal.
3. Role and Functions of the committee:
 - i) To determine the methodology for preparation of Assets Accounts on mineral and energy resources in State.

Natural Resource Account of Madhya Pradesh

- ii) Initiation and preparation of disclosure statement on revenues and expenditure related to NRA.
- 4. Meeting:
 - i) The committee shall meet once in two months or earlier if required.
 - ii) TA/DA by the members shall be drawn from their respective departments.
- 5. A copy of this notification is available on the website www.mpfinance.gov.in

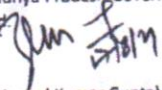

(Irene Cynthia J.P.)
Director Budget & Additional Secretary
to Government of Madhya Pradesh
Finance Department

No. 729 /R-734/2020/B-1/FD-IV

Dated: 17.08.2021

Copy to:-

1. A copy is forwarded to Accountant General (A&E)-I Madhya Pradesh, Gwalior w.r.t their letter No. TM/07/NRA/D-762 dated 06.10.2020 for information and necessary action.
2. A copy is forwarded to the Chairperson and all the Members of the committee for information and necessary action.
3. A copy is forwarded to the Controller, Government central Printing Press, Madhya Pradesh, Bhopal with the request to publish the notification in the extra ordinary Gazette of Madhya Pradesh Government immediately and supply the 20 copies thereof to this department for record.


(Arvind Kumar Gupta)
Under Secretary
to Government of Madhya Pradesh
Finance Department

**प्राकृतिक संसाधन लेखांकन प्रकोष्ठ (NRA Cell) की बैठक
दिनांक 8 दिसम्बर 2022 का कार्यवाही विवरण**

आज दिनांक 8 दिसम्बर 2022 को संचालनालय भौमिकी तथा खनिकर्म के कार्यालय प्रमुख के कक्ष में प्राकृतिक संसाधन लेखांकन प्रकोष्ठ (NRA Cell) की बैठक आयोजित की गयी। बैठक में कार्यालय महालेखाकार, भोपाल से उप महालेखाकार श्री भूषण भिरुड, कार्यालय प्रमुख संचालनालय भौमिकी तथा खनिकर्म, संयुक्त संचालक (वित्त) एवं प्रकोष्ठ के अन्य अधिकारी/कर्मचारी उपस्थित थे।

उप महालेखाकार महोदय द्वारा एन.आर.ए. की सांख्यिकी गतिविधियों की बिन्दुवार समीक्षा की गयी एवं आवश्यक मार्गदर्शन दिया गया। उप महालेखाकार महोदय को अवगत कराया गया की वित्तीय वर्ष 2020-21 तक के आंकड़ों के बेलीडेशन की सभी जिलों की जानकारी कार्यालय महालेखाकार, ग्वालियर से आये दल को 14 अक्टूबर 2022 को उपलब्ध करा दी गयी है। वित्तीय वर्ष 2021-22 एवं वर्ष 2022-23 के प्रथम त्रैमास के अधिकांश जानकारी कार्यालय महालेखाकार को उपलब्ध करा दी गयी है। शेष जानकारी आगामी विधानसभा सत्र उपरांत उपलब्ध कराने हेतु उप महालेखाकार महोदय को आश्वासन दिया गया।

एन.आर.ए. की सांख्यिकी गतिविधि में संबंधितों में दक्षता उन्नयन हेतु जनवरी माह के प्रथम सप्ताह में सभी जिला कार्यालयों के अधिकारियों/कर्मचारियों के लिए एक प्रशिक्षण कार्यक्रम कार्यालय महालेखाकार के सौजन्य से आयोजित किया जाना सुनिश्चित किया गया है, जिसकी तिथि पृथक से नियत की जायेगी।

टेबल 1, 2, 3 एवं 4 की जानकारी के एकजाईकरण के संबंध में उप महालेखाकार महोदय द्वारा यह सुझाया गया कि एन.आर.ए. के आंकड़ों के संकलन संबंध में डिजिटल तकनीक का उपयोग करें। इस हेतु पोर्टल अथवा एप्लीकेशन का विकास किया जाये। इस संबंध में उड़ीसा, पश्चिम बंगाल राज्यों का उदाहरण भी दिया गया जहाँ एन.आर.ए. के आंकड़े पोर्टल के माध्यम से संकलित किये जा रहे हैं। छत्तीसगढ़ राज्य में भी पोर्टल/एप्लीकेशन निर्माणाधीन है।

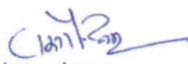
इस समय मध्यप्रदेश में एन.आर.ए. के संबंध में कोई पोर्टल/एप्लीकेशन का विकास नहीं हुआ है, अतः वर्ष 2021-22 के आंकड़ों का एकजाईकरण कार्यालय महालेखाकार के विशेषज्ञों के सहयोग से पूर्ण किया जायेगा, किन्तु आगामी वर्षों के आंकड़े मध्यप्रदेश में डिजिटल पोर्टल/एप्लीकेशन के माध्यम से एकजाई की जायेगी। पोर्टल/एप्लीकेशन के विकास के लिए कार्यालय महालेखाकार के विशेषज्ञ मार्गदर्शक के रूप में चाहे जाने पर सेवाएँ प्रदान करेंगे।

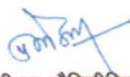
एन.आर.ए. प्रकोष्ठ की गतिविधियों को गति प्रदान करने के लिए प्रकोष्ठ में एक पूर्णकालिक डी.एम.ए. संलग्न करने की नितांत आवश्यकता है, अतः एक डी.एम.ए. को संलग्न करने के संबंध में निर्णय लिया गया, ताकि जानकारी के लिए जिला कार्यालयों से फॉलो-अप तथा चालू वित्तीय वर्ष के आंकड़ों का एकजाईकरण का कार्य को तेजी से आगे बढ़ाया जा सके।

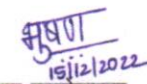
टेबल 1 में उत्पादित खनिजों का मौद्रिक स्वरूप दर्शाया जाना है, उसमें खनिजों का Ex-mine Value अथवा Pit-mouth Value (खान मुख मूल्य) लिया जाना है या बाजार मूल्य इस संबंध में उच्च कार्यालय से जानकारी प्राप्त कर कार्यालय महालेखाकार द्वारा अवगत कराया जायेगा।

अवैध उत्खनन की खनिजवार मात्रा की जानकारी संचारित किये जाने हेतु उप महालेखाकार महोदय द्वारा सुझाया गया है ताकि वार्षिक संसाधन ह्रास (Depreciation) की जानकारी प्राकृतिक संसाधन लेखांकन के उपबंधों के अनुरूप लेखाकर्म को पूर्ण किया जा सके।

इस प्रकार घन्यवाद पूर्वक बैठक पूर्ण हुई।


संयुक्त संचालक
(वित्त)


अधीक्षण भौमिकीविद्
एवं प्रमुख N.R.A. प्रकोष्ठ
संचालनालय भौमिकी एवं
खनिकर्म, भोपाल


उप महालेखाकार
19/12/2022

