



**Office of the Comptroller and Auditor General of India,
10 Bahadur Shah Zafar Marg, New Delhi - 110 - 124.**

(Government Accounting Standards Advisory Board)

Minutes of monthly meeting for the month of January 2022 on progresses made by the States on preparation of Asset Accounts on Mineral and Non-Renewable Energy Resources in States

Background: In the light of the action plans envisaged in the Concept Paper on Natural Resource Accounting in India released in July 2020, GASAB Secretariat has brought out a book containing the templates of Asset Accounts on Mineral and Non-Renewable Energy Resources in the States. The books containing the templates were circulated to the State Governments and the State Accountants General in October 2021. The first short term action plan is to prepare the first draft of Asset Accounts in the States for the year 2020-21 by March 2022.

Additionally, guidelines on automation of data collection methodologies from the district units from April 2022 was also prepared and circulated to the States for discussion and implementation. The draft guidelines/Standard Operating Procedures (SoPs) have been shared with the eminent members of the Consultative Committee and their comments have also been taken into consideration while revising the guidelines/SoPs. Two drafts of the guidelines have so far been issued, the latest being on 14 January 2022.

Consequent upon the national declaration at CoP 26 at Glasgow, the Asset Accounts had been slightly revised to include tentative tables (as tables 4 and 5 of the Asset Accounts) for capturing data on carbon footprint (State wise and per capita in States) and progress in renewable energy resources in the States.

In order to handhold the States in this ambitious exercise besides resolving issues and challenges and addressing the constraints being faced while preparing the first draft of the Accounts, GASAB headquarters has planned monthly meetings at the end of each month from October 2021 till March 2022 or preparation of Asset Accounts in all States and UT (with legislature), whichever is earlier. The first, second and third meetings were held between 27 – 29 October, 30 November – 2 December 2021 and 4 January 2022 respectively. This is the fourth meeting for the month ending January 2021.

Date and time : (fourth meeting) : 31 January 2022 (2.30 pm to 5.30 pm) and 1 February 2022 (10.30 pm to 1.30 pm)

Participating State: All 28 States and 2 UTs with Legislature.

Mode: Virtually through MS Teams arranged by RTI, Prayagraj.

Chair: Addl Deputy CAG, GASAB.

Proceedings: At the outset, ADAI GASAB conveyed thanks to the States in which the first draft of the Asset Accounts have been completed while requesting the States in which the Accounts are partially prepared to go full steam to ensure that the works are completed within the targeted timeline. Special mention was made about the involvement of the State

Governments and concerned Departments in extending all support and co-operation in building up the Asset Accounts. For the States which reported to be in initial stages, increased involvement of the Offices, need for deployment of field personnel for collection/collation of data and also the need for more effective co-ordination with the State Governments and concerned Departments were impressed upon.

ADAI GASAB re-iterated that the project, a nationally important one, is obligatory as India is a signatory to the SDGs. Importance of comprehensiveness, robustness and correctness of data was repeatedly emphasized by the Chair repeatedly.

Regarding the final report on Asset Accounts, ADAI GASAB desired that detailed information on mineral map in the States, players involved, process followed in mining activities, full listing of minerals visa-a-vis those prioritized by the States including the rationale for such short listing, automation process under implementation in the State etc may be mentioned. Sr. AO, GASAB proposed that a broad structure of the report on Asset Accounts in the States be prepared and circulated from GASAB headquarters to ensure uniformity in the reports across States. This was approved by ADAI, GASAB.

Thereafter, a presentation was made by Sr. AO, GASAB detailing the targets for the work, status of work as of December 2021 and decisions taken, status of fortnightly reports received from the States reporting in initial stages, additional information required to be incorporated in the Asset Accounts on comparison between extraction vis-à-vis production and again with the final dispatch; need for monitoring the carbon footprint and progress of renewable energy resources to monitor attainment of the national declarations made at Conference of Parties (COP) – 26 held at Glasgow, UK, pertinent issues of Guidelines/SoPs released on automation process on data flow from April 2022 onwards, and important issues to bear in mind while finalizing the Accounts like correctness of data, use of checklists while verification/validation of data/Accounts, need for discussion of the Guidelines/SoPs with the States for their implementation from April 2022. Copy of presentation is enclosed.

Thereafter, the works done by the States during the month and till the end of January 2022 and targets set for remaining period with specific inputs for February 2022 as presented by the States were discussed. A number of State Governments were also present during the meeting while Government of Arunachal Pradesh, Assam and Jharkhand made their presentations/informed the status. A statement showing status of work in the States is appended.

State Governments of Assam and Jharkhand thanked the Offices of the CAG of India, GASAB and the State Accountants General for the initiative and hand holding of the States. The Asset Accounts will go a long way in helping the States with invaluable datasets on mineral and energy resources with specific monitoring on SDGs and climate change, they asserted.

All the States reported to have endorsed the second draft of the Guidelines/SoPs on automated data processing for Asset Accounts from April 2022 with the concerned State Governments.

Based on the presentations and inputs received during the meeting, the status of work in the States is divided into three distinct categories as shown in the following table:

Asset Accounts prepared and are under verification/validation	Asset Account partially prepared – remaining works underway	Still in initial stages
16 States/1 UT	10 States	2 States/1 UT
<i>Andhra Pradesh, Assam, Goa, Gujarat, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Punjab, Rajasthan, Sikkim and Telengana</i>	<i>Arunachal Pradesh, Bihar, Chhattisgarh, Jharkhand, Tamil Nadu, Madhya Pradesh, Maharashtra, Tripura, Uttar Pradesh and West Bengal</i>	<i>Delhi, Haryana and Uttarakhand</i>
Remarks: These States may complete the verification/validation of the Accounts expeditiously based on the checklists provided in the guidelines/SoPs and minutes of mid-term appraisals.	Remarks: States may speed up the pending works and quickly proceed to verification/validation process in view of the timelines approaching in about two months.	Remarks: As on two months are left, States may re-orient their strategies to speed up the process through meetings and contacts with the State Government and Departmental Officers. The States are also requested to share status of works – fortnightly (15 Feb' 22) .

Based on the presentations and discussions during the meeting, the following action plans are decided:

- The reports on Asset Accounts may contain a detailed mineral map showing the availability of minerals as envisaged in the draft Guidelines/SoPs, players involved (Government, private) and their roles, process followed in mining activities, full listing of minerals vis-a-vis those prioritized by the States including the rationale for such short listing, automation process under implementation in the State etc. Draft templates on the structure of the Reports will be circulated from GASAB by end of March 2022. This will enable uniformity in the formats of the reports in States across the country.
- The resources may be prioritized and selected in consultation with the State Governments so as to ensure comprehensive coverage of data while other minerals can be gradually incorporated in the Accounts in subsequent years. Major thrust should be on the comprehensiveness and correctness of data captured in the Accounts.
- Departmental figures on balances, extractions/productions/dispatch – generated from the source units (districts) will be the basis of compilation and to be cross verified with the figures of Indian Bureau of Mines (IBM) figures. Variations of departmental figures vis-à-vis IBM figures to be highlighted to point towards the need for reconciliations.

- Wherever the accounts are finalised, validations may be carried out in view of the checklists included in the Guidelines/SoPs and also circulated along with the minutes of mid-term appraisal.
- Joint teams may be deployed (wherever not yet done) for collection of information from the field units/directorates. In States where the Asset Accounts had been prepared, joint teams to be deployed for sample check of data in the district units/directorates.
- Additional inputs on comparison between extraction and dispatch, actual production as reported by Departments vis-à-vis IBM and depiction of closing stock of extracted resources/produced resources may be incorporated in the Asset Accounts (please refer to email dated 11 November 2021).
- Information on carbon emission showing State-wise carbon emission and State's per capita carbon emission and information on generation of renewable energy in the States from various sources like solar, wind, hydel power sources during 2020-21 may be captured in the tentative tables incorporated in the second draft of the Guidelines/SoPs circulated from headquarters in January 2022.
- Regarding the automated¹ data collection mechanism to be implemented from April 2022, second draft of Guidelines/SoPs may be discussed thoroughly with the State Governments and their comments/suggestions communicated to GASAB wing in headquarters for updating the document. Simultaneously, trainings/workshops may be conducted for the departmental officers to sensitise them about the various requirements of the monthly reports (electronically or manually as the case may be), importance of data validations, certifications and supporting documents required to be sent along with the reports.
- It was decided that the standard gradation of major minerals like coal, iron ore etc wherever practicable should be followed while including the sub-classification of minerals. If the details are not readily being maintained by the States, this could be discussed and incorporated in the system of monthly automated data processing envisaged for implementation from April 2022.
- Decisions taken and included in the minutes of earlier meetings shall continue to apply *mutatis mutandis* and may be scrupulously followed.

¹ Automated data processing system as envisaged in the Guidelines/SoPs refers to a system of data collection system or a periodic reporting system (both electronic or manual as practiced in different States) from the districts, monthly, to the Directorates and finally to the Accountants General Offices for building up the Asset Accounts month by month and their checks and balances to ensure correctness of data/information. This may not be confused with the automation (or electronic mechanism) being implemented in some of the States for monitoring mining activities. In States having electronic automated mining monitoring systems, the monthly reporting mechanism as envisaged in the Guidelines/SoPs could be suitably embedded. In other States, manual reporting mechanism may be implemented.

Before concluding, the ADAI GASAB reiterated the need for all out efforts in the States to ensure that the Asset Accounts as targeted are prepared in a comprehensive manner with utmost diligence on correctness of the figures and most importantly to be completed within the target timeline of March 2022. In case of any need for pursuing at the highest levels in the States, the matter may be immediately brought to the attention of GASAB wing in headquarters for necessary action.

Meeting ended with vote of thanks to the Chair.

State-wise position of status reported during the meeting (ending January 2022)

Sl. No	State	Status reported
1.	Andhra Pradesh	<ul style="list-style-type: none"> Asset Accounts prepared and is under validation with State Government and Audit Office. Key documents in support of Asset Accounts collected.
2.	Arunachal Pradesh	<ul style="list-style-type: none"> Resources have been shortlisted as natural gas, petroleum, coal, limestone and dolomite. Data compilation is in progress. Simultaneous verification/analysis of data is also going on. Expected to complete by February end.
3.	Assam	<ul style="list-style-type: none"> Revised Asset Accounts received from State Government is under validation. Environment and Forest Department to provide data on sand and shingle. Data on crude oil, natural gas, coal, limestone and granite already provided by Directorate of Geology and Mining.
4.	Bihar	<ul style="list-style-type: none"> First draft of Asset Account prepared by State Government in which some deficiencies have been found. Matter taken up with State Government for clarification and revision of the Asset Accounts. Verification/rectification and validation of data is targeted to be completed by February 2022. One workshop on implementation of Guidelines/SoPs conducted during the month.
5.	Chhattisgarh	<ul style="list-style-type: none"> Physical flows of Asset Accounts on major minerals prepared. Opening balance and closing balances are being worked out. Selected minor minerals to be taken up during February 2022. Prioritising some minor minerals for the first Asset Accounts for the year 2020-21 – agreed to. Joint teams are visiting weekly to the Directorate of Geology and Mining for speeding up the work.
6.	Delhi	<ul style="list-style-type: none"> No participants.
7.	Goa	<ul style="list-style-type: none"> Asset Account prepared and shared with the State Government. Check list provided in the second version of Guidelines/SoPs used to validate the data. Asset Accounts to be finalised immediately after receipt of State Governments responses and will be submitted within

		the targeted timeline.
8.	Gujarat	<ul style="list-style-type: none"> • Asset Accounts completed in all respect. • Total of 41 minerals/sub-minerals covered. • Compiled data shared with State Government and Audit Office for verification/validation. • Average market price of some minerals yet to be worked out – targeted during February 2022.
9.	Haryana	<ul style="list-style-type: none"> • Minerals prioritized and shortlisted. • Asset Accounts prepared by State Government was found to be inconsistent – duly communicated to them for rectification. • Joint teams to start visiting the districts for data verification. • Completion of first draft targeted by 15 March 2022. • Regarding the automation of data capture, State Government has been requested to modify the e-permit system to provide room for incorporating the required systems of monthly data capture as envisaged in the Guidelines/SoPs. • ADAI, GASAB urged the State AsG to ensure more focused approach.
10.	Himachal Pradesh	<ul style="list-style-type: none"> • Asset Accounts prepared with 2 major and 10 minor minerals. • The State reported to be in final stage of preparing the table 2. • Working out the proved reserves is targeted during February 2022.
11.	Jammu & Kashmir	<ul style="list-style-type: none"> • Asset Account has been prepared and is under validation. • Data validation received from the State Government. • Partial information on generation of renewable energy received – AsG offices are pursuing with the State Government for remaining information.
12.	Jharkhand	<ul style="list-style-type: none"> • Some data received from the State Government. Remaining data targeted to be completed by 15 February 2022. • Balances to be worked out by the end of February 2022. • Directorate of Mines informed that data in respect of 12 out of 24 districts have been collected, collated and forwarded to the AsG office. The State Government Department assured of providing data in respect of remaining 12 districts by February 2022. • Jharkhand being a minerally important State having huge mine base and data, the enormity of the task was highlighted which was agreed to and the co-operation of the department was appreciated.
13.	Karnataka	<ul style="list-style-type: none"> • Asset Accounts prepared (all tables 1, 2 and 3) and forwarded to the State Government and Audit Office for verification/validation. • Validation underway in Audit Office through sample test check of data. • Validation process of 9 out of 13 major minerals already completed and the remaining works were continuing.

14.	Kerala	<ul style="list-style-type: none"> • All three tables of Asset Account prepared, but for some information. • Opening balance worked out for 7 out of 8 major minerals and 6 out of 11 minor minerals. • Tables are being sent to the State Government and Audit Office for validation. • Targets of March 2022 will be met.
15.	Madhya Pradesh	<ul style="list-style-type: none"> • State Government has provided partial data. • Joint teams are working at district level offices. • Data compilation is expected to be completed by February 2022. • State Government has agreed to implement the automation process envisaged in the Guidelines/SoPs.
16.	Maharashtra	<ul style="list-style-type: none"> • First draft of Asset Accounts received from State Government by the end of December 2021. • Some deficiencies noticed referred to the State Government. • Revised Accounts received during last week of January 2022. Under examination. • Asset Accounts targeted to be completed by mid-February 2022 and sent to the State Government for validation. • Regarding variation between stock and extraction, it was clarified that proven/proved reserves to be reckoned as opening balance only and any extraction in excess of the stock will result in negative closing stock which may be commented upon as a result of mining beyond the proven quantity of reserves.
17.	Manipur	<ul style="list-style-type: none"> • Joint teams/task force floated. • Asset Accounts on major minerals prepared – data verification completed. • State proposed to limit the Asset Accounts on major minerals for the year 2020-21 which was agreed to. • Need for validation of the data in the Asset Accounts vis-à-vis the checklists provided in the second draft of Guidelines/SoPs was requested before finalizing the data. • State Government is being coordinated with for implementation of automated process (manual reporting mechanism) for data capture from April 2022.
18.	Meghalaya	<ul style="list-style-type: none"> • Asset Account prepared and verification/validation also completed except limestone. • Reconciliation of lease holder data and departmental data going on. • Remaining works like verification/validation of whole Asset Accounts including closing balance of 2019-20 to be completed by February 2022. • Other information required for the Asset Account would be called for during February 2022. • As regards gaps in the systems being followed in district offices, it was requested that the matter may be taken up with

		<p>the Departmental authorities while discussing the Guidelines/SoPs for their implementation.</p> <ul style="list-style-type: none"> As regards illegal mining data, in addition to the data on cases of illegal mining detected by the departments, cross verification of information of Directorate of Mineral Resources with the Customs Department check posts on Bangladesh could also be one such mechanism as was done during pilot study for the year 2019-20.
19.	Mizoram	<ul style="list-style-type: none"> Asset Account prepared and validation in progress.
20.	Nagaland	<ul style="list-style-type: none"> Asset Accounts received from the State Government. Extraction figures not incorporated while the State Government has reported revenue realisation from extraction during the year. This needs reconciliation. Also, extraction of crude oil during 1980s have been included in the extraction column which needs revisiting as the Account is being prepared for the year 2020-21 and extractions during the year may only be incorporated here.
21.	Odisha	<ul style="list-style-type: none"> Asset Account prepared by the State Government indicated some inconsistencies. Being communicated to the Department. Validation of data going on. Preparation of Asset Accounts on minor minerals targeted during February 2022.
22.	Punjab	<ul style="list-style-type: none"> Final draft of Asset Account received from the State Government on 18 January 2022. Monetisation of physical flows being carried out. Validation of data of Asset Accounts underway. Fortnightly monitoring implemented which has speeded up the work. Asset Accounts targeted to be completed in all respect by 15 March 2022 and submitted to headquarters within the targeted timeline. Regarding illegal mining, it was suggested that all possible sources may be requested for information on illegal mining detected by them for possible inclusion in the Accounts. If nil report is received, the same may categorically mentioned as notes to the Asset Accounts.
23.	Rajasthan	<ul style="list-style-type: none"> Asset Accounts prepared and validation is underway. Workshop on automation of data processing held with the State Government. The State assured of submission of the final report to headquarters within the targeted timeline.
24.	Sikkim	<ul style="list-style-type: none"> Asset Accounts received from the State Government and sent to headquarters. During February 2022, field teams would visit the districts for data validation. It was suggested to validate the Asset Accounts in the view of the checklists provided in the second draft of the

		Guidelines/SoPs.
25.	Tamil Nadu	<ul style="list-style-type: none"> • Asset Account has been prepared but for some information in tables 2 and 3. • Account of major mineral, fossil fuel and minor minerals prepared. • Opening balances of the major minerals received. • Second draft of Guidelines/SoPs shared with the State Government. • During February 2022, remaining data on major/minor minerals as well as the validations of the Asset Accounts are planned. • Also, virtual meeting on automation of data processing as per the second version of Guidelines/SoPs to be held.
26.	Telangana	<ul style="list-style-type: none"> • Asset Accounts prepared and validation was underway in the Audit Office. • Validations targeted to be completed by February 2022 by when State Governments confirmation is also expected. • Asset Account can be finalised and sent to headquarters within the targeted timeline. • Workshops on automation of data processing as envisaged in the Guidelines/SoPs are being finalised in coordination with the State Government. • Regarding the inability of the Department to provide sub-class wise data for the Asset Accounts 2020-21, it was suggested that the State Government may be requested to examine this aspect to design the automated data processing from April 2022 so that data under all sub-class of minerals are captured.
27.	Tripura	<ul style="list-style-type: none"> • First draft Asset Accounts consisting of natural gas and sand received from the State Government on 31 January 2022 – under examination. • Matter is being taken up with the ONGC for rectifying some discrepancies detected in the natural gas account. • One training/workshop on automation of data processing organized in the State. • Valuation of resources being carried out and also analysis with the revenues reported in the Finance Accounts.
28.	Uttar Pradesh	<ul style="list-style-type: none"> • Asset Accounts on silica sand and limestone prepared and sent to State Government for validation. • Asset Account on granite, pyrophyllite and Dyspora partially prepared for want of opening balances. • For coal, some data was wanting in respect of one mine – on which a letter requesting for data has been issued. • Asset Account of all the above minerals are targeted to be finalised by February 2022 end. • Regarding the automation of data processing, the AsG Offices were in consultation with the State Government for holding trainings/workshops and implementation.

29.	Uttarakhand	<ul style="list-style-type: none"> • No information has been received till date. • Letter has been issued to the Secretary, Mines. • It was suggested that more vigorous pursuance including deployment of joint teams needed to be resorted to in the wake of lack of response from the State Government.
30.	West Bengal	<ul style="list-style-type: none"> • The Office of the Pr. AG (A&E) was spearheading the work in the State. • List of minerals to be incorporated in the first draft of Asset Accounts for 2020-21 has been shortlisted and finalised in consultation with the State Government. • Asset Account is targeted to be completed by the end of February 2022. • Workshop on automation of data processing organized for the State Government. The State Government has appreciated the Guidelines/SoPs. • The State Government has agreed to the proposal of the Pr. AG(A&E) to expand the automated systems being in place for sand mining for other mineral resources. • The Pr. AG (A&E) has also suggested the State Government to enable the AsG Offices to be the beneficiaries of the automated systems which was appreciable. • The State Government was also eager to look into the automated systems implemented in other States as presented during monthly meetings, like Odisha, Gujarat. Many other States have also gone ahead in implementing their own e-permit systems like Andhra Pradesh, Karnataka etc which can also be consulted. Meanwhile, since the State does not have an end to end electronic automation system, the State may resort to manual automated data processing as envisaged in the guidelines so that the data for Asset Accounts from April 2022 can start flowing from the district mining offices as per the protocol provided in the document.



Natural Resource Accounting

Goal 1 Preparation of Asset Accounts on Mineral & Non- Renewable Resources

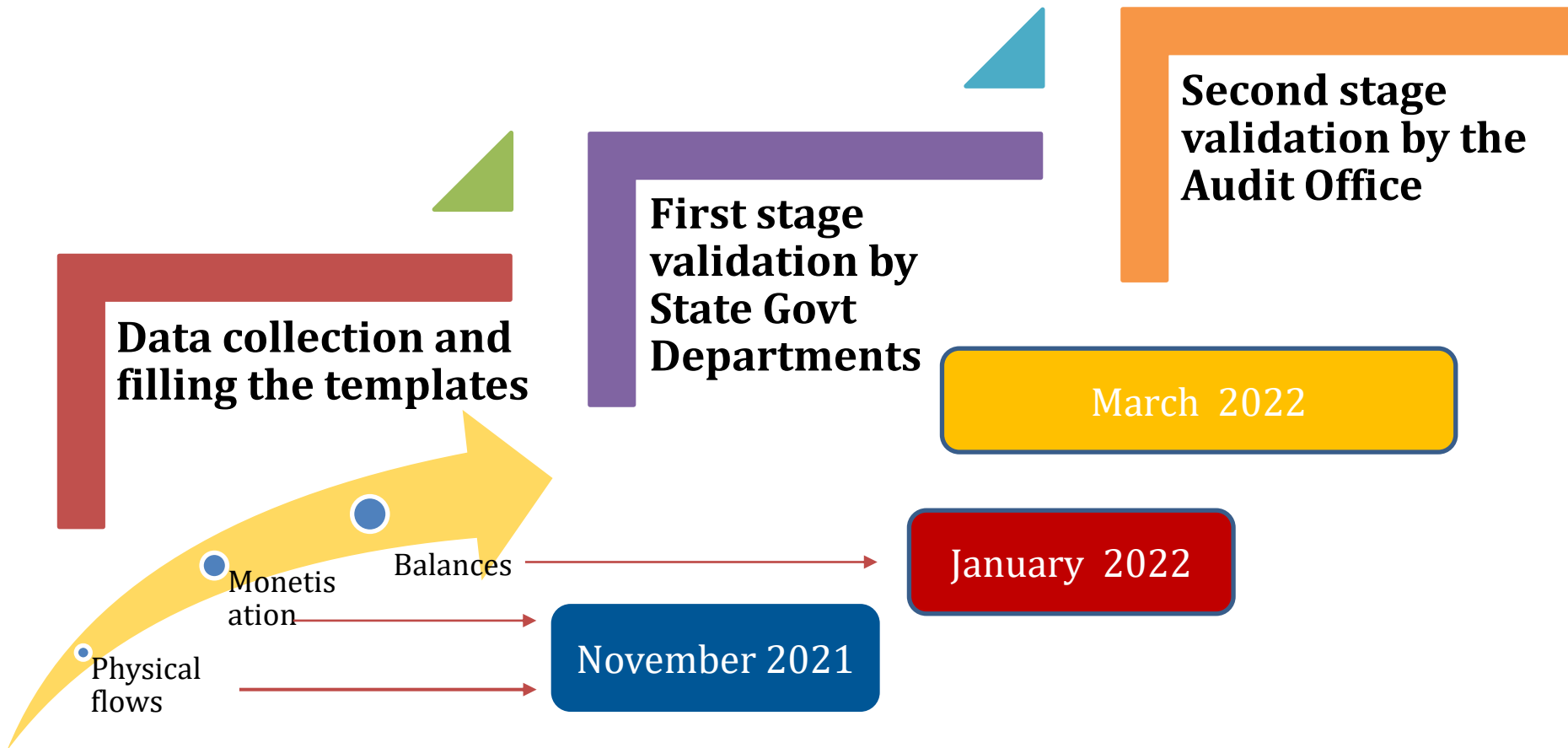
Fourth meeting -

31 Jan - 1 February 2022

**Government Accounting Standards Advisory Board,
CAG of India**



The stages and associated targets



Status – December 2021

First draft Asset Accounts prepared/received from State Government and under verification/validation	Account partially prepared – remaining works underway	Still in initial stages
17 States/UT (with Legislature)	5 States	8 States/UT (with Legislature)
<i>Andhra Pradesh, Assam, Bihar, Goa, Gujarat, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Meghalaya, Mizoram, Odisha, Rajasthan, Sikkim and Telengana</i>	<i>Jharkhand, Manipur, Punjab, Tamil Nadu and Uttar Pradesh</i>	<i>Arunachal Pradesh, Chhattisgarh, Delhi, Haryana, Nagaland, Tripura, Uttarakhand and West Bengal</i>

Decisions taken – Mid-term appraisal

- States in the initial stages to share progress-fortnightly (received)
- States with partial completion may quickly complete the remaining works
- States where Asset Accounts were completed to proceed to next stage – verification and validation
- Careful selection of the minerals to be covered – in consultation with the State Governments
- Correctness of the figures – priority
- Departmental figures generated from the districts – to be the basis
- Variations between departmental figures and IBM figures to be pointed out
- Joint teams to be formed – wherever not formed
- Verification/validation of Asset Accounts based on checklists (circulated with the minutes of mid-term appraisal)
- Information on carbon emission and renewable energy resources to be incorporated – tentative formats of tables circulated through second draft of Guidelines/SoPs

Status – fortnightly reports

Arunachal Pradesh	Resources listed and information awaited on Asset Accounts	Status as of January ending to be seen
Chhattisgarh	<ul style="list-style-type: none"> • State Government furnished unsigned provisional figures. State Government was requested to provide all supporting documents, awaited. • For Minor Minerals, State Government agreed to provide figures for four minerals • Covid restrictions delaying work 	Status of January ending to be seen
Delhi	<ul style="list-style-type: none"> • NRA Cell yet to be formed in Delhi. • Divisional Commissioner and Department of Forest has furnished Nil report. • Delhi Jal Board requested for providing information on water resources 	Matter to be taken up the concerned department by GASAB.

NRA in India – an initiative of GASAB

Status – fortnightly reports

Haryana	Desired data is not being maintained by the Office of Director General of Mines in the format that is required to be filled in Table 2	<ul style="list-style-type: none">• Teams may be deployed to capture the data.• Meeting with ACS, Mines to be scheduled immediately
Nagaland	<ul style="list-style-type: none">• Officers from Office of AsG visited the Departments• As a result, Department has furnished information on the Asset Accounts on mines and minerals	<ul style="list-style-type: none">• Major breakthrough is appreciated.• Table – comments on total extraction (only 2020-21 to be considered)• Verification and validation process may begin forthwith
Tripura	<ul style="list-style-type: none">• Meeting held with State Government for information.	Status as of January ending to be seen

Status – fortnightly reports

Uttarakhand	<ul style="list-style-type: none">• Information on tables 1 to 3 was targeted to be obtained from the Department during the fortnight ending 15 January 2022.• The same is yet to be received.	<ul style="list-style-type: none">• Teams may be deployed to capture the data.• The matter may be pursued vigorously with the Departments
West Bengal	<ul style="list-style-type: none">• Email issued to Office of the DGA, Coal for information in respect of coal (reply awaited)• Letter issued to all concerned State Government Departments enclosing second draft of Guidelines/SoPs• Team of NRA Cell visited the Director, Mines for obtaining data (work in progress)	<ul style="list-style-type: none">• Initiatives to impress upon various authorities to provide appreciated• Status of January ending to be seen.

Additionalities

Email dt 11 Nov

- Actual extraction
- Production
- Variation and pc variation
- Deptt vis-à-vis IBM figures
- Stock

SOPs (Dec'21)

- Data collection mechanism
- Documentary support
- Validations – regular and also annual

Monitoring natl decl at COP 26

- Carbon emission
- Progress of generation of renewable energy

Guidelines/SoPs

- Second draft released (14 Jan)
- Check lists
- Tentative Tables of carbon emission and renewable energy resources

Some important points

Correctness of data of extraction, production, dispatch

Verification/Validation process-use of checklists (illustrative)

Additional inputs – extraction vis-à-vis production vis-à-vis dispatch. Analysis of departmental figures with IBM – point out

Information to be captured on carbon emission – 2020-21 (State-wise/per capita) – E,F&CC, Pollution Control Boards, Municipal Bodies etc

Information on progress in renewable energy generation in States – tentative tables circulated

Guidelines/SoPs – to be discussed with States – atleast two trainings/workshops requested by Feb'22 – for implementation by 1 April 2022

NRA in India – an initiative of GASAB

A large, realistic-looking hand is shown from the palm side, holding a small, green, grassy globe. On top of the globe, there is a blue solar panel mounted on a black stand. In the background, there are two white wind turbines, green trees, and a bright yellow sun in a clear blue sky. The overall scene is a metaphor for sustainable energy and environmental stewardship.

THANK YOU!

**@ S N Biswas,
SAO, GASAB**
