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Ministry of Home Affairs

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THIRD-PARTY EVALUATION

OF

UMBRELLA SCHEME

OF

BORDER INFRASTRUCTURE

AND

MANAGEMENT (BIM)



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Report on

Third Party Evaluation of Umbrella Scheme of Border Infrastructure and Management (BIM)

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Director, IIPA

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LIST OF ABBREVIATIONS AND ACRONYMS

AI	Artificial Intelligence
AR	Assam Rifles
BADP	Border Area Development Program
BFL	Border Floodlights
BIM	Border Infrastructure and Management
BM-I	Border Management-I
BOP	Border Out Post
BR	Border Roads
BSF	Border Security Force
CCS	Cabinet Committee on Security
CIBMS	Comprehensive Integrated Border Management System
DoBM	Department of Border Management
GOI	Government of India
HLEC	High Level Empowered Committee
IB	International Border
ICP	Integrated Check Post
IIPA	Indian Institute of Public Administration
IMD	Indian Meteorological Department
IoT	Internet of Things
ITBP	Indo Tibetan Border Police
LAC	Line of Actual Control
LOC	Line of Control
MHA	Ministry of Home Affairs
SSB	Sashastra Seema Bal

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Ministry of Home Affairs (MHA) entrusted **Indian Institute of Public Administration (IIPA)** with the **Third-Party Evaluation of Umbrella Scheme of Border Infrastructure and Management (BIM)** of **Border Management Division – I (BM-I), Department of Border Management (DoBM)**.

TERMS OF REFERENCE

The Terms of Reference for the evaluation study, as mandated by MHA, are as follows:

The Evaluation study is expected to assess:

1. Implementation mechanism,
2. Performance of the scheme,
3. Financial allocations under the scheme,
4. Assets/Service creation & maintenance plan,
5. Assessment of operational issues, terrain conditions, and manpower analysis
6. Need for extension of the implementation period and required time frame,
7. Achievement of deliverables,
8. Gaps in achievement of outcomes,
9. Key bottlenecks & challenges,
10. Input use efficiency,
11. Vision for the future, and
12. Recommendation for the scheme with reasons.

UMBRELLA SCHEME OF BORDER INFRASTRUCTURE AND MANAGEMENT

The **Umbrella Scheme of 'Border Infrastructure and Management'(BIM)** is a Central Sector Scheme comprising 60 projects aimed at Infrastructure development of India's International Borders. The Implementation body for the Scheme is **Department of Border Management (DoBM), Ministry of Home Affairs (MHA), Government of India.**

The scheme aims to enhance the security along the borders of the country and involves implementing a number of projects for the development of border infrastructure such as **Border Fence, Border Roads, Border Floodlights and Border Out Posts (BOPs)** along international borders of the country. It also involves deploying technological solutions to service border areas which are not feasible for the development of physical barriers.

All these components of border infrastructure are combined to form the umbrella scheme of "**Border Infrastructure and Management (BIM)**". Presently, the scheme consists of **41 Ongoing Projects** under different Border Works along with **19 New Projects** which have been taken up or are proposed to be taken up. The **Cabinet Committee on Security (CSS)** and a **High-Level Empowered Committee (HLEC)** approves and monitors the progress of the projects periodically. **The scheme has been approved with Rs 8,606 Crores for implementing the 60 projects in the period between 2017-2020.**

The Department of Border Management in view of strengthening and securing the borders and to create infrastructure in the border area of the country, have undertaken several initiatives. These include construction of the fence, floodlighting, roads and BOPs along the Indo-Pakistan and the Indo-Bangladesh Borders, construction of roads and BOPs along the Indo China, Indo-Nepal, Indo-Bhutan & Indo-Myanmar borders.

OBJECTIVE OF THE STUDY

1. Objective of the Study

The main aim of this study is to assess the effectiveness of the scheme, whether the scheme has achieved the desired level of coverage and impact and to suggest modifications/ improvements to be made to the scheme with a view to ensure its greater efficacy and impact.

The key objectives of the study are as follows:

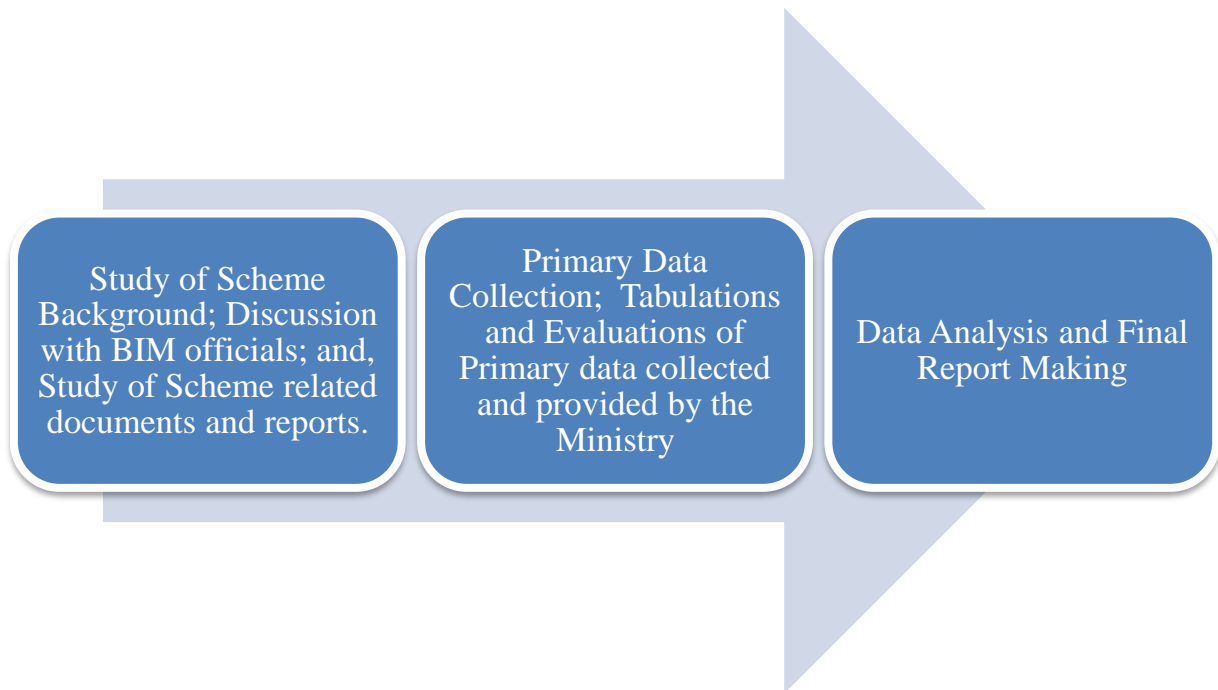
- To evaluate the implementation mechanism,
- To evaluate the performance of the scheme,
- To evaluate the financial allocations under the scheme,
- To evaluate the assets/service creation & maintenance plan,
- To assess the operational issues, terrain conditions, and manpower analysis
- To assess the need for extension of the implementation period and required time frame,
- To evaluate the achievement of deliverables,
- To evaluate the gaps in achievement of outcomes,
- To evaluate the key bottlenecks & challenges,
- To evaluate the input use efficiency,
- To evaluate the vision for future, and
- To recommend for the scheme with reasons.

2. Scope of the Study

The scope of the study encompasses evaluation of the efficacy of BIM as a scheme. For the study of impact analysis, all the components of the scheme in terms of its objectives, implementation mechanism, achievements and suggestions have been studied.

3. Methodology

A. Research Study Work Flow:



B. Research Study Process Steps:

Step 1: Preliminary study: This step involves review of literature and discussions with BM-Division I, Department of Border Management: -

- Assessment of plans of BIM Scheme.
- To understand the process of implementation of the scheme.
- To assess the working mechanism and gaps during the planning and implementation of the scheme.
- To access the list of beneficiaries.
- To examine the budgetary allocations of the scheme.

- To assess the data of the infrastructure and assets created by the BIM in execution of the scheme.
- Evaluations done by any other committee/organization.

Step 2: Detailed discussion / kick off meeting with BIM officials.

Step 3: Development of Instruments for the study and Data tabulation.

- Preparation of Questionnaires and conducting of Interviews/meetings.
- Tabulation and In-depth study of the data provided by the MHA.

Step 4: Data analysis and Report writing.

C. Data Collection

The study team applied a balanced combination of quantitative and qualitative tools of data collection. The research study encompassed the identification of primary and secondary sources of information. The detailed evaluation pertaining to research methodology followed by the study team, are as under:

I. Collection of Secondary Data

The study team collected secondary information from the following sources:

- 1) Annual Reports, notifications, and other documents as provided on the official websites of MHA.
- 2) Other relevant information mentioned on the websites of Government of India, BGFs and The Institute for Defence Studies and Analysis (IDSA).
- 3) Copies of relevant documents provided by BM-I Division of MHA.
- 4) BIM Scheme guidelines, project status in terms of its implementation and other relevant information of the scheme.

II. Collection of Primary Data

- 1) Considering the evaluation study was carried out during the pandemic, field visits and interviews with BGFs officials were ruled out. Selective visits were planned to BM-I Office, MHA at MDCNS New Delhi.
- 2) The BIM officials were interviewed on these visits and data was collected as per the study objectives. The Agenda points and Questionnaires are attached in Annexures I, II & III.

4. Data Analysis

The subsequent information entails the qualitative and quantitative aspects of the methodology used for the study.

A. Qualitative Analysis

The qualitative analysis of BIM Scheme was performed by evaluating all the secondary as well as primary data and the crucial BIM documents provided by BM-I Division /MHA. The Cabinet Notes, Office Memorandums and other official documents by the respective departments/ Ministries were also a part of the analysis made by the study team.

B. Quantitative Analysis

The quantitative analysis of the Scheme was done based on the data provided by BIM officials. This included financial data of all the ongoing and newly proposed projects under different Border Works as well as some specific data provided in terms of scheme achievements, the number/ Kms of construction and development of border infrastructure completed or under progress under the BIM Scheme during the three-year period between 2017-2020.

5. Limitations of the Study

The following were a few of the limitations of this study:

1. Given, the study took place during the Covid-19 pandemic, lack of field visits attribute to one of the major limitations of the study.
2. Considering, the scheme pertains to the National Security of the country, access to data was allowed in BM office only.

SUMMARY OF FINDINGS

During the evaluation study conducted by IIPA, the data was analysed under different aspects like Fund allocation and expenditure on yearly basis, Border-wise details of all projects, physical as well financial status, and reasons of delay in projects' completion between the years 2017-2020.

The study team observed and derived the following findings while analyzing the data pertaining to the BIM scheme:

1. Fund Allocation and Expenditure

- The final allocated budgetary amount differs from the projected amount. The final allocated amount was approx. half the projected amount.
- The highest allocation from the total outlay was done in the FY 2019-2020. While the lowest allocated amount was in FY 2018-2019.
- The highest allocation under the **Ongoing Projects** has been made for Indo-Bangladesh Border while Indo-Pakistan Border has been allocated the second highest amount.
- Due to Covid crisis, there has been an imposition of limit on funding this year. Such non-availability of funds or delays in sanctions may cause further cost and time-overrun.

2. Project Status and Completion

A quick study of all the fund and status details of the projects highlights that there has been no cost-overrun for most of the projects. However, some time-overrun has been noted in some of the projects owing to different geographical, climatic, or administrative issues.

The major reasons of delay as observed are:

- Shortage of availability of resources/ executing firms.
- Limited working seasons due to climatic and terrain conditions like flashfloods, avalanches, snowfall, incessant rains, etc.
- Land acquisition issues in the border areas due to remoteness which makes the resolution of land issues in border areas is a time-consuming process.
- Low response/participation in tenders.

- Hostile/firing incidents at Indo-Pak Border.
- Delay in finalization of DPR by the agencies.
- Delay in finalization of tenders due to low response.
- Problems in transportation of material in extremely difficult terrain.
- No road connectivity at most of the BOPs due to unfavorable terrains.
- Recent timeline extension by GOI due to prevailing COVID-19 situation.
- Due to non-conducive situation on international border in case of Jammu sector along IPB, due to which the work could not be completed in specified time.
- In some projects, work is held up due to public protest.

3. Scheme Achievements

- The BIM scheme has been able to successfully accomplish construction and upgradation work of border infrastructure on the borders. The major highlights of the achievements include increasing number of constructions of Border Roads and Border Out Posts along all borders.
- Furthermore, construction and installation of more Border Fence and Floodlights along the Indo-Pakistan and Indo-Bangladesh Borders have also been achieved.

4. Major Reasons of Delay

- It has been observed the major delay in completion of the project has been due to implementation of new Land Acquisition Act 2013 which resulted in delay in acquisition of land and in obtaining forests/wildlife clearances. The delay has been noted on part of the States in acquisition of land and in obtaining mandatory statutory forest and wildlife clearances which further slow-down the project work.
- Certain clearances are required under Coastal Regulation Zone (CRZ, 2011 Notification), Forest (Conservation) Act, 1980 and Wildlife Protection Act 1972 in case of activities in coastal areas, forest, and protected areas (National Park/ Sanctuary) respectively which are time-consuming.
- Delays are also caused due to public resistance in form of protests.

5. Other Issues and Challenges

- There has been time overrun in completion of some projects due to unforeseen circumstances and natural calamities, like unprecedented rains, consequential floods, and land sliding. The harsh climatic conditions pose a major challenge in managing the work force and completion of the project work on time.
- The cost of projects also increases considerably due to price escalation, increase in the scope of work, upgradation of specifications for roads, electrical works etc.
- Besides that, erratic power supply and adverse climatic and terrain conditions in the border areas also undermine the functioning of sophisticated surveillance system.

RECOMMENDATION AND SUGGESTIONS

During the study of Third-party Evaluation of the BIM scheme, IIPA team made many important observations. In the process of evaluation, the IIPA team thoroughly studied the aspects of the scheme including its framework, implementation mechanism, achievements as well as its key issues and challenges. During the process of conversations with the officials of BM-I Division, different types of concerns, challenges and suggestions were placed. The study has incorporated all the concerns that were brought up along with the recommendation suggested by IIPA.

IIPA highly recommends continuation of the scheme as the scheme is a significant step in the direction of revolutionizing the border management system in the country. The conceptualization of the umbrella scheme has been an important step in collating all the diverse project works currently undergoing on different borders of the country under one roof. This has enabled government authorities to not only handle border management more efficiently but also go deeper into the challenges and bottleneck issues plaguing the border security.

To make the scheme more effective, the study team of IIPA has the following summary suggestion and recommendations for consideration of the competent authorities:

1. Prioritizing of ongoing projects and new projects keeping in view the availability of funds and country's security requirements. This will enable redirection of available resources and time towards fulfillment of urgent security concerns on borders.
2. Timely completion may be ensured by maximizing labour and machinery resources during the working season every year.
3. In case where there is revision of cost in projects, specific physical and financial milestones with corresponding half yearly targets may be incorporated in pursuance.
4. Keeping in view varying needs, priority-based requirements, operational issues, terrain conditions and other inevitable circumstances, execution of projects and incorporation of changes in their scope as well as extension of time for completion within the overall financial ceiling may be timely processed.
5. State Governments may speed up land acquisition and aid in timely completion of projects.
6. It is noted that there is a cost overrun in most of the projects. MHA may put in place a Project Monitoring Unit (PMU) for these projects in addition to the existing high level monitoring committees. The project monitoring unit may review and solve delays and issues at a faster pace and on a more frequent basis.
7. The approval procedure for revised cost estimates should be initiated as soon as the revision becomes inevitable, rather than waiting for funds released to be fully spent.
8. To ensure the timely execution of projects adherence to the proposed timeline is important. Periodical reviewing of the projects may also help in fixing accountability of delays in execution of projects.
9. Efforts may be made to utilise the knowledge and skill set available with private sector in the context of deployment and management of advanced electronic surveillance system and maintenance of security related data.

CHAPTER 1:
INTRODUCTION

1. INTRODUCTION

1.1. BACKGROUND

India has a large and complex land border, covering around 15,106.7 kms, which it shares with its neighbouring countries of Bangladesh, China, Pakistan, Nepal, Myanmar and Bhutan, as well as a small portion with Afghanistan, with all possible terrains—namely deserts, fertile lands, swampy marshes, snow-covered peaks and tropical evergreen forests. The difficult and varied terrain, peculiar conditions related to each terrain, climatic conditions, relationship with certain neighbours, etc. all these factors and more make safeguarding our borders challenging.

These borders are also characterized by attempts of infiltration by terrorists, illegal cross border migration and smuggling of arms, ammunition, contraband, and other illegal cross border activities. Expedient development of border infrastructure is therefore an important requirement for strengthening of the capabilities of Border Guarding Forces (BGFs) and keeping a check on infiltration and prevention of illegal migration and other cross border activities.

The creation of border infrastructure also helps in promoting a sense of security amongst the population living on the border areas and facilitate economic development in these areas. The Umbrella Scheme of Border Infrastructure and Management has been conceptualized and launched by the Union Government with the same objectives and strategy. The scheme brought together all the pre-existing border works projects under one theme and increased the efficacy of border management.

1.2. UMBRELLA SCHEME OF BORDER INFRASTRUCTURE AND MANAGEMENT (BIM)

The **Umbrella Scheme of ‘Border Infrastructure and Management’** is a Central Sector Scheme comprising of 60 projects, which involves 41 Ongoing and 19 New projects, aimed at infrastructure development on the border areas. The implementation agency for the scheme is Department of Border Management (DoBM), Ministry of Home Affairs, Government of India.

Aims and Objectives of BIM

The BIM scheme has the following objectives-

1. Maintaining the security along the International Borders of India.
2. To check the infiltration and cross-border crimes and other criminals from across the borders.
3. To improve border domination along the international borders.
4. To improve border domination by Border Guarding Forces (BGFs).
5. To provide sense of security to the border residents.
6. Strengthening infrastructure of Coastal Police Force for patrolling and surveillance of coastal areas.

Deliverables of the Scheme

The critical and important focus areas of Border Management under the Scheme include:

1. Fencing and Floodlighting of the Borders.
2. Construction of Roads and other essential infrastructure in the Border areas.
3. Construction of Border Out Posts, Observation Towers and Light Houses required by BGFs.
4. Induction of High Technology Surveillance Equipment and Systems including Space Technology, for better border surveillance and intelligence by the BGFs.
5. Providing weapons, communication equipment, vehicles to the BGFs.
6. Providing watercraft, communication equipment, and vehicles to Police Forces of the States having Coastal Borders.
7. Assistance to the states for construction, renovation of Police Stations and Police Check Posts in the border areas as part of upgrading and strengthening policing infrastructure along land and coastal borders.

Area Dominance

‘Area Dominance’ is a significant strategic component of the BIM. It is a method employed by the border guarding forces to effectively guard the border by establishing a string of border outposts (BOPs), each covering an area of around 2.5–3 kilometers. From these Border Out Posts they also send out regular patrols, as well as establish checkpoints at various locations to detect and deter illegal border crossings. Parties sent out on patrols also interact with the local people to gather intelligence.

Implementation Agency

The implementation agency for the scheme is **Border Management Division-I (BM Division- I), Department of Border Management (DoBM), Ministry of Home Affairs, Government of India.**

Ministry of Home Affairs (MHA)

The Ministry of Home Affairs (MHA) discharges multifarious responsibilities, the important among them being - internal security, border management, Centre-State relations, administration of Union Territories, management of Central Armed Police Forces, disaster management, etc.

Department of Border Management (DoBM)

The Group of Ministers, in their report on reforming the National security system had recommended creation of a separate **Department of Border Management** in the Ministry of Home Affairs to pay focused attention to the issues relating to border management. In pursuance of this, a Department of Border Management within the Ministry of Home Affairs was created on January 6, 2004.

Border Management Division -I (BM - I)

BM-I Division is a sub-division Of DoBM and deals with issues relating to strengthening of International land borders, which encompasses management of land borders by creating and improving infrastructure works like Border Fencing, Border Roads, Border Flood Lighting and Border Out Posts of Border Guarding Forces along Indo-Pakistan, Indo-Bangladesh, Indo-China, Indo-Nepal, Indo-Bhutan and Indo-Myanmar borders. BM-I Division also deals with matters related to Empowered Committee on Border Infrastructure (ECBI).

Scheme Performance Indicators

The scheme aims to create permanent border infrastructure like Border Fence, Border Roads, Border Floodlights and Border Out Posts and deployment of technological solutions along the international borders of the country for improved border domination by the respective BGF. Therefore, the indicators for the evaluation of the performance of the scheme are construction and development of Border Roads, Border Fence, Border Floodlights and Border Out Posts and other critical infrastructures like OP Towers, and deployment of patrolling and surveillance technology.

Potential for Employment Generation

According to the BM-I documents, Development of border infrastructure is labour intensive. Manpower as well as machinery are required to first build it and then subsequently to maintain it. Development of border infrastructure will not only promote a sense of security amongst the people living in border areas but will also facilitate better implementation of development initiatives. This ensures direct and indirect employment.

Target Beneficiaries

The present schemes are for development of infrastructure such as border fence, border road, border flood lights and Border Out Posts along international border of the country for National security. The infrastructure will be utilized by the BGFs for improved border domination leading to better security along the borders of the country. However, as stated in the documents, the scheme is not meant for individual beneficiaries.

Border Works Agencies

Public Sector Undertakings viz. **National Building Construction Corporation (NBCC)**, **National Projects Construction Corporation Limited (NPCC)** and **Engineering Projects (India) Limited (EPIL)** have been engaged in addition to the existing agencies namely, **Central Public Works Department (CPWD)**, **Border Roads Organisation (BRO)**, **State PWDs** apart from **Department works** by the **BGFs**.

International Borders and Border Guarding Forces of India

Presently, India shares its borders with six different countries: Pakistan, China, Nepal, Bhutan, Bangladesh & Myanmar. These six international borders are guarded by different paramilitary forces.

Indo-Pakistan and Indo-Bangladesh borders are guarded by the **Border Security Force (BSF)**. Indo-China border is guarded by the **Indo-Tibetan Border Police (ITBP)**, a specialized mountain force. Indo-Nepal and Indo-Bhutan borders are guarded by the **Sashastra Seema Bal (SSB)**, while the Indo-Myanmar border is guarded by the **Assam Rifles (AR)**.

Deployment of forces along the borders is based on the principle of ‘*One border, One Border Guarding Force*’ (*BGF*). Accordingly, domination of each border has been entrusted to a border guarding force.

Approach and practices of border management vary from one border to another, based on the security perceptions and relationship with the neighboring country.

Guarding of the Indian borders as undertaken by the various border guarding forces which are deployed along different borders is tabulated below:

Table 1.1 Indian Borders and their BGFs

S.No.	International Border	Guarded by
1	Indo-Pakistan Border (IPB)	Border Security Force (BSF)
2	Indo-Bangladesh Border (IBB)	Border Security Force (BSF)
3	Indo-China Border (ICB)	Indo-Tibetan Border Police (ITBP)
4	Indo-Nepal Border (INB)	Sashastra Seema Bal (SSB)
5	Indo-Bhutan Border (IBhB)	Sashastra Seema Bal (SSB)
6	Indo-Myanmar Border	Assam Rifles (AR)
7	Coastal Borders	Indian Coast Guard (ICG) and Coastal State/UT Police

Besides the BGFs, Indian army is guarding land borders along the LOC on Pakistan border along with BSF and Line of Actual Control (LAC) on China border along with ITBP.

Indian Navy is responsible for overall maritime security which includes coastal and offshore security. Indian Coast Guard has been additionally designated as authority responsible for coastal security in India’s territorial waters including areas to be patrolled by the Coastal Police.

Financial Outlay of BIM Scheme (As Projected and Approved)

In 2017, Department of Border Management had sought the approval of the Expenditure Finance Committee (EFC) for continuation of the Umbrella Scheme ‘Border Infrastructure and Management’, comprising of 41 ongoing and 19 new projects with a total financial outlay of Rs. 44099.72 Crores.

Out of this, an amount of Rs. 17048.72 Crores was proposed to be required during the three-year period between 2017-2020 and Rs. 14506.54 Crores was said to be required beyond 2020 to complete the projects within the approved timelines.

Table 1.2 Projected Year-wise Expenditure by DoBM as in CCS note

S. No.	Schemes	Total Cost of projects	Expenditure during 2017-18 (projected)	Expenditure During 2018-19 (projected)	Expenditure During 2019-20 (projected)	Total during 2017-2020
1	Indo-Bangladesh Border Works	10418.88	1198.10	1481.35	991.22	3670.67
2	Indo-Pakistan Border Works	7524.17	1560.44	1911.51	2638.26	6110.21
3	Indo- China Border Works	10291.99	272.95	950.31	655.79	1879.05
4	Indo-Nepal Border Works	3853.00	200.92	100.00	200.00	500.92
5	Indo-Bhutan Border Works	4600.00	1.00	1.00	300.00	302.00
6	Indo-Myanmar Border Works	15.00	15.00	0.00	0.00	15.00
7	Coastal Security	1579.91	261.31	600.00	589.58	1450.89
8	Border Out Posts (BGFs)	5816.77	372.19	1365.42	1382.37	3119.98
	TOTAL	44099.72	3881.91	6409.59	6757.22	17048.72

As against the projected outlay of Rs. 17048.72 Crores for the three financial years period of 2017-2020, the EFC in the meeting held on 22.11.2017 recommended the continuation of the umbrella scheme ‘Border Infrastructure and Management’ with a financial outlay of Rs. 8606.00 Crores, subjected to the condition and year-wise financial outlays as given below: -

Table 1.3 Approved Outlay by EFC for 2017-2020

Year	2017-18	2018-19	2019-20	Total
Final Outlay (Rs.in Crores)	2600	2860	3146	8606

Project Approval and Monitoring Authorities under BIM

The border infrastructure projects are monitored through a **High Level Empowered Committee (HLEC)**, headed by the Home Secretary, a **Steering Committee** headed by the Secretary (Border Management) besides reviewing at the level of Joint Secretary. **Hon'ble Home Minister** also reviews the Border-wise projects from time to time. The projects are also monitored through **Progress Report** received from the concerned stake holders.

Projects under different Schemes are undertaken based on **Detailed Projects Reports (DPRs)**. Regarding Revised Cost Estimates, it is initiated as soon as the revised estimates are available and the same are considered for approval.

DPRs/Revised cost estimates are reviewed by a **Technical Committee** headed by the **DG (CPWD)** and the same are submitted for approval by **HLEC**.

Different Committees and their Powers under BIM

1. HLEC (High Level Expert Committee)

A. Powers of High-Level Empowerment Committee

- Full powers to take decisions on Border Infrastructure proposals involving an expenditure up to Rs.500 Crore
- Full powers for administrative approval and for according financial sanctions for undertaking works
- Full powers for creation of posts connected with the project both at the headquarter and in the field subject to the conditions that such creations of posts will be according to the approved norms if any exists
- Grant of project allowances and other allowances of staff working on the projects
- Approval for award of work on cost basis where necessary
- Taking final decision on any matter of administrative nature, relaxation of the provisions of GFRs etc. in the matters of approval of tenders and award of contracts
- Full powers of according financial sanctions for procurement/deployment of various kinds of border surveillance equipment by the BGFs

- Full powers for according financial sanctions for construction and renovations of police stations. Police check posts and strengthening policing infrastructure land and coastal borders
- In case of any difference of opinion in financial matters between the Finance Ministry's representative on the empowered committee and the members of the committee the matter will be referred for a decision at ministerial level and further to the cabinet committee on security if difference of opinion persists

B. Composition of the HLEC is as following:

1. Home Secretary ...(Chairman)
2. Foreign Secretary... (Member)
3. Secretary, Dept. of Expenditure, Ministry of Finance (Member)
4. Secretary, Ministry of Defense ...(Member)
5. Special Secretary/ Additional Secretary (Border Management), MHA (Member)
6. Director General, Border Security Force/
Director General, Indo-Tibetan Border Police/
Director General, Assam Rifles/
Director General, Sashastra Seema Bal ...(Member)
7. Director General (Works), Central Public Works Department ...(Member)
8. Financial Adviser (Home), MHA ...(Member)
9. Joint Secretary (BM), MHA ... (Member Secretary)

2. Technical Committee

Technical committee was constituted to expedite scrutiny of the cost estimates and technical details with respect to construction of fencing, floodlights, roads, OP Towers, ring-bunds, bunkers, and other such works required for strengthening security.

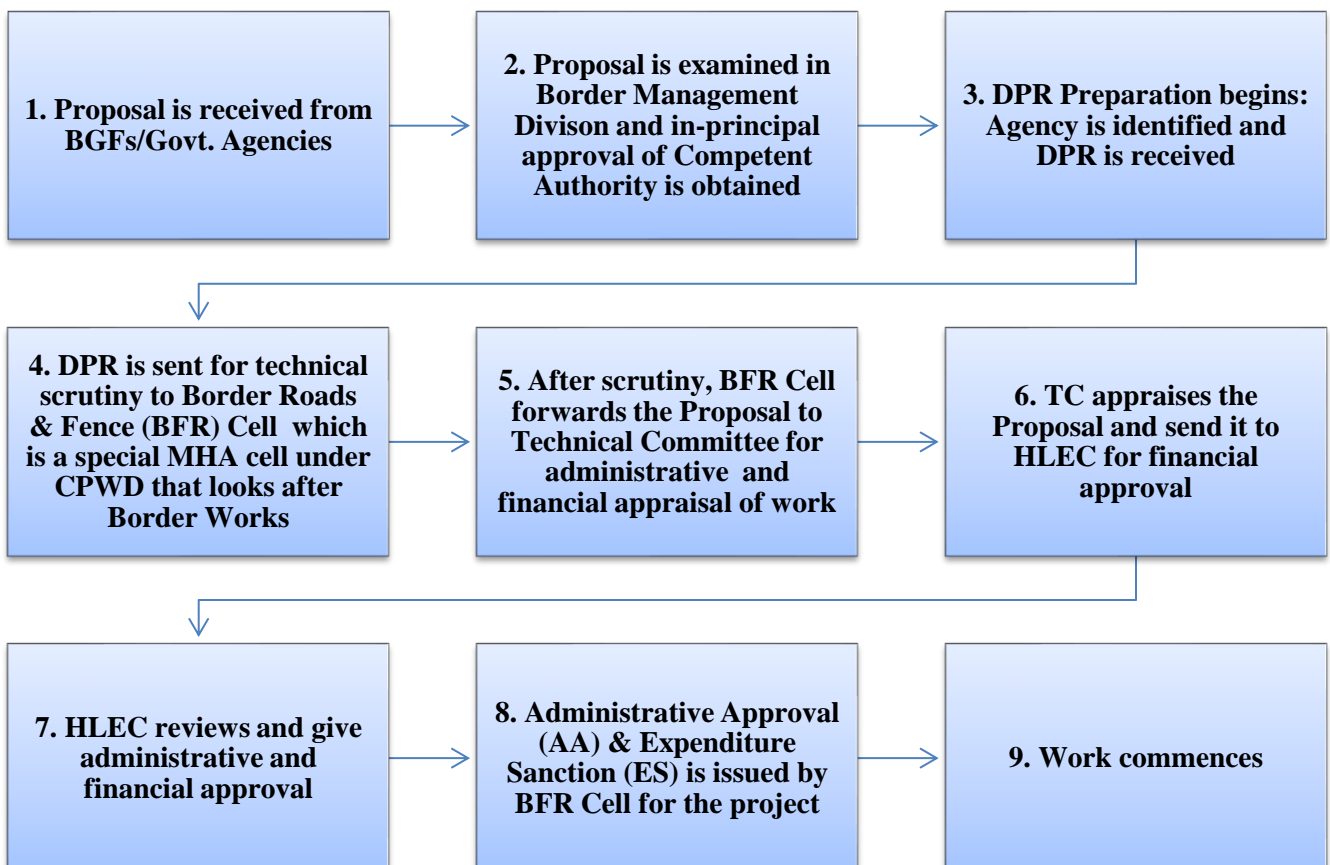
A. Powers of Technical Committee

- Scrutinize the cost estimates and technical details relating to construction of fencing, flood lighting, roads, OP Towers, ring-bunds, bunkers, and other such works required for strengthening security
- Process financial estimates of various projects/ works/ items for placing them for the approval of High Level Empowered Committee

B. Composition of Technical Committee

1. DG (Works) CPWD ...(Chairman)
2. A representative each from Military Engineering Services, Border Roads Organization and Forces concerned ...(Member)
3. Financial Adviser (Home), MHA ...(Member)
4. Financial Adviser, Ministry of Urban development ...(Member)
5. Financial Adviser, Ministry of Defense, or his representative ...(Member)
6. Joint Secretary (BM), MHA ... (Member Secretary)

Implementation Mechanism of BIM



1.3. OBJECTIVE OF THE STUDY



Figure 1.1 Key Objectives of the Study

The main aim of this study is to assess the effectiveness of the scheme, whether the scheme has achieved the desired level of coverage and impact on the beneficiaries and to suggest modifications/ improvements to be made to the Programme with a view to ensure its greater efficacy and impact.

The key objectives of the study are as follows:

- To evaluate the implementation mechanism,
- To evaluate the performance of the scheme,
- To evaluate the financial allocations under the scheme,
- To evaluate the assets/service creation & maintenance plan,
- To assess the operational issues, terrain conditions, and manpower analysis
- To assess the need for extension of the implementation period and required time frame,
- To evaluate the achievement of deliverables,
- To evaluate the gaps in achievement of outcomes,
- To evaluate the key bottlenecks & challenges,
- To evaluate the input use efficiency,
- To evaluate the vision for future, and
- To recommend for the scheme with reasons.

1. Scope of Study

The scope of the study encompasses evaluation of the efficacy of BIM as a scheme. For the study of impact analysis, all the components of the scheme in terms of its objectives, implementation mechanism, achievements and suggestions have been studied.

2. Methodology

A. Research Study Work Flow:

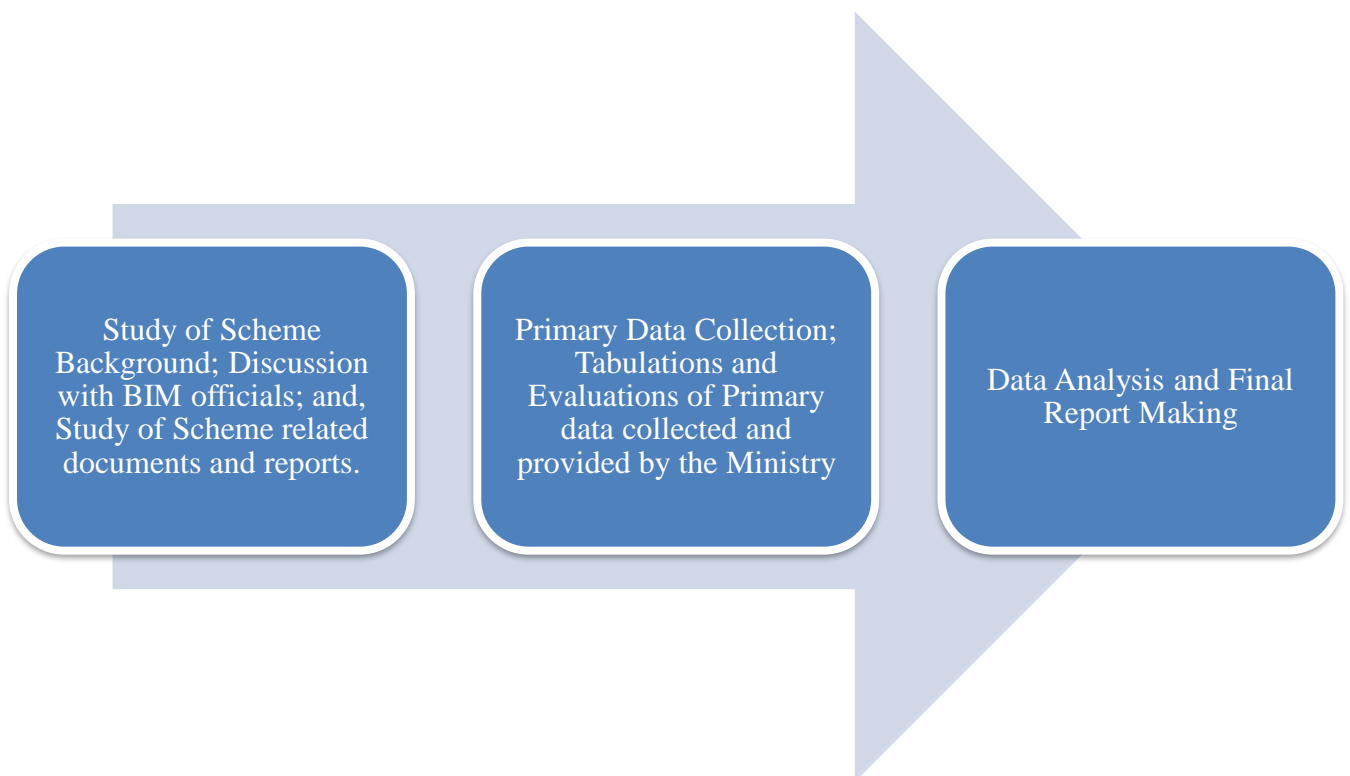


Figure 1.2 Research Study Work Flow

B. Research Study Process Steps:

Step 1: Preliminary study: This step involves review of literature and discussions with BM-Division I, Department of Border Management: -

- Assessment of plans of BIM Scheme.
- To understand the process of implementation of the scheme.

- To assess the working mechanism and gaps during the planning and implementation of the Scheme.
- To access the list of beneficiaries.
- To examine the budgetary allocations of the scheme.
- To assess the data of the infrastructure and assets created by the BIM during execution of the scheme.
- Evaluations done by any other committee/organization.

Step 2: Detailed discussion / kick off meeting with BIM officials.

Step 3: Development of Instruments for the study and Data tabulation:

- Preparation of Questionnaires and Conduct of Interviews/ meetings.
- Tabulation and In-depth study of the data provided by the MHA.

Step 4: Data analysis and Report writing.

C. Data Collection

The study team applied a balanced combination of quantitative and qualitative tools of data collection. The research study encompassed the identification of primary and secondary sources of information. The detailed evaluation pertaining to research methodology followed by the study team, are as under:

I. Collection of Secondary Data

The study team collected secondary information from the following sources:

- 1) Annual Reports, notifications, and other documents as provided on the official websites of MHA.
- 2) Other relevant information mentioned on the websites of Government of India, BGFs and The Institute for Defence Studies and Analysis (IDSA).
- 3) Copies of relevant documents provided by BM-I Division of MHA.

- 4) BIM Scheme guidelines, project status in terms of its implementation and other relevant information of the scheme.

II. Collection of Primary Data

- 1) Considering the evaluation study was carried out during the pandemic, field visits and interviews with BGFs officials were ruled out. Selective visits were planned to BM-I Office, MHA at MDCNS New Delhi.
- 2) The BIM officials were interviewed on these visits and data was collected as per the study objectives. The Agenda Points and Questionnaires are attached in Annexures I, II & III.

3. Data Analysis

The subsequent information entails the qualitative and quantitative aspects of the methodology used for the study.

A. Qualitative Analysis

The qualitative analysis of BIM Scheme was performed by evaluating all the secondary as well as primary data and the crucial BIM documents provided by BM-I Division /MHA. The Cabinet Notes, Office Memorandums and other official documents by the respective departments/ Ministries were also a part of the analysis made by the study team.

B. Quantitative Analysis

The quantitative analysis of the Scheme was done based on the data provided by BIM officials. This included financial data of all the ongoing and newly proposed projects under different Border works as well as some specific data provided in terms of scheme achievements, the number/ Kms of construction and development of border infrastructure completed or under progress under the BIM Scheme during the three-year period between 2017-2020.

4. Limitations of the Study

The following were a few of the limitations of this study:

1. Given, the study took place during the Covid-19 pandemic, lack of field visits attribute to one of the major limitations of the study.
2. Considering, the scheme pertains to the National security of the country, access to data was allowed in BM office only.

CHAPTER 2:
MANAGEMENT OF INTERNATIONAL
BORDERS OF INDIA

2. MANAGEMENT OF INTERNATIONAL BORDERS OF INDIA

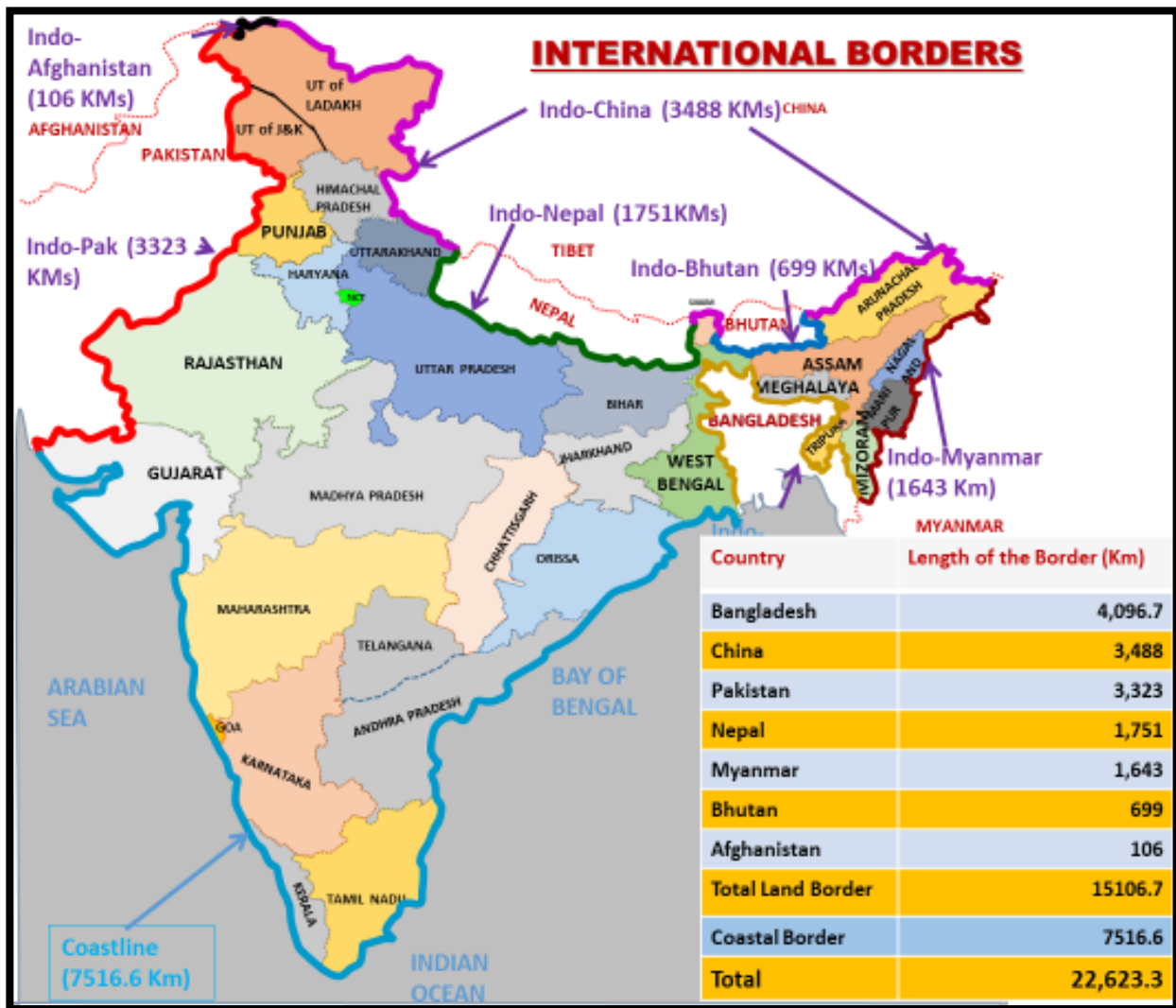


Figure 2.1 Representational Image of India's International Borders (BM-I Division)

2.1. INTRODUCTION

The proper management of borders is of vital importance to national security. The management of our borders presents many challenges as this requires coordinated and concerted action by administrative, diplomatic, security, intelligence, legal, regulatory, and economic agencies of the country to secure our frontiers and sub serve its best interests. These aspects were highlighted by a Group of Ministers (GoM) set up post-Kargil War to review the National security system in its entirety.

The GoM made several recommendations relating to effective management of land and coastal borders, effective monitoring and surveillance of illegal cross border activities, deployment and

restructuring of the Border Guarding Forces, all round development of border areas, issues relating to illegal migration and subversive activities in the border areas etc.

The recommendations of the GoM were accepted by the Government. Several of these recommendations pertaining to additional raising in Border Guarding Forces, deployment of Sashastra Seema Bal (SSB) on Indo-Nepal and Indo-Bhutan borders, effective coordination mechanism between the various Central and State agencies, strengthening the Coastal Security Scheme, deployment of hi-tech electronic surveillance equipment on the international borders of the country, creation of infrastructure in the border areas have been/are being implemented.

The proper management of borders is paramount for the country's national security. Over and above, there is also the continuous challenge of coping with long-standing territorial and boundary disputes with the neighbouring countries, China, and Pakistan, which needs to be catered.

Recognising this fact, a Department of Border Management was established in the Ministry of Home Affairs with a view to paying focussed attention to the management of borders/coast.

Infrastructure

One of the major initiatives of the Department of Border Management has been Construction of roads along the Indo-Bangladesh, Indo-Pakistan, Indo-Myanmar, Indo-China, Indo-Nepal and Indo-Bhutan borders, Construction of fencing along the Indo-Bangladesh, Indo-Pakistan and Indo-Myanmar borders, Construction of floodlighting along the Indo-Bangladesh and Indo-Pakistan, and Construction of BOPs on all the international borders.

INTERNATIONAL BORDERS OF INDIA

India has three types of land borders: International Border (IB), Line of Control (LoC) and Line of Actual Control (LAC).

- IB is the demarcation that has been agreed among countries and has been accepted by the rest of the world.
- LoC is the de facto border and separates Pakistan-occupied Kashmir from India's UT of Jammu & Kashmir.
- LAC is the line that separates current Indo China border at few places. The disputed and unsettled nature of our boundaries (both land and maritime) needs security.

All six international borders of India have been detailed below:

1. Indo-Bangladesh Border (IBB):



Figure 2.2 Indo-Bangladesh Border (Encyclopaedia Britannica <https://www.britannica.com/place/Bangladesh>)

India has a 4096.70 Kms long international border with Bangladesh. The border runs through/along the States of West Bengal (2216.70 km), Assam (263 km), Meghalaya (443 km), Tripura (856 km), and Mizoram (318 km). The Indo-Bangladesh border is marked by a high degree of porosity and checking of illegal cross border activities and illegal migration from Bangladesh into India have been major challenges. To prevent illegal migration and illegal activities, including anti-national activities from across the border, the Government of India had sanctioned the construction of Border Fence

Border Roads and Border Floodlights. BOPs have been sanctioned for construction along the Indo-Bangladesh border, the balance length of International border along Bangladesh will be secured by using a combination of physical and nonphysical barriers.

The large settlements of illegal immigrants have also been the cause of social unrest and underlying tensions in the north-eastern states. The local population is overwhelmed by the presence of outsiders and the resulting impact on their way of life. This social unrest is a cause of concern for the Government of India, as it poses a serious threat to the internal security of the country. Illegal immigration, including both refugees and economic migrants, has been a persistent burning issue for the states and central governments.

2. Indo-Pakistan Border (IPB)



Figure 2.3 Indo-Pakistan Border (BM-I Division)

India shares 3323 kms of its land border with Pakistan. This border runs along the states of Gujarat (508 km), Rajasthan (1037 km), Punjab (553 km), and UTs of J&K and Ladakh (1225 km). The Indo-Pakistan border has varied terrain with distinct geographical features. This border is characterised by attempts of infiltration by the terrorists and smuggling of arms, ammunition, and contraband, the LoC being the most active and live portion of the border.

The harsh and varied climatic conditions along this 3,323-km of border compound the challenges faced by our armed forces in securing these areas. An increase in cross-border infiltration is observed during the pre-winter season, when vigilance becomes extremely tough due to overcast conditions and snowfall along the mountainous terrain.

Other factors like the political instability and crisis in Pakistan also lead to an upsurge in cross-border tension along the border areas.

Cross-border terrorism stands out as one of the major reasons of discord between India and Pakistan.

3. Indo-China Border (ICB):



Figure 2.4 Indo-China Border (BM-I Division)

India shares 3488 kms of border with China that runs along the UT of Ladakh (1597 km), Himachal Pradesh (200km), Uttarakhand (345km), Sikkim (220 km) and Arunachal Pradesh (1126km). Originally the Indo-Tibetan border (before the occupation of Tibet by China in 1950), this border remains disputed along its entire length and is one of the key points of friction between the two countries over the past years.

Appointment of special envoys and formation of joint working groups have been initiated time and again, incidents along the border have been reported in the past. All this makes it imperative for the Indian armed forces to maintain constant vigil along the LAC (Indo- China border).



Figure 2.5 Indo-Nepal, Indo-Bhutan and Indo-Myanmar Borders (Encyclopaedia Britannica <https://www.britannica.com/place/Nagaland>)

4. Indo-Nepal and Indo-Bhutan Borders (INB & IBhB):

India shares 1751 km long border with Nepal which passes through Uttarakhand (263 km), UP (560 km), Bihar (729 km), West Bengal (100km) and Sikkim (99 km). Simultaneously, India shares 699 km long border with Bhutan which passes through Sikkim (32 km), West Bengal (183 km), Assam (267 km) and Arunachal Pradesh (217 km).

The Indo-Nepal and Indo-Bhutan Borders are open borders and are characterised by visa free regime. People from both the countries as well as from India are free to enter each other's territories.

However, to prevent trans-border crimes and other illegal activities, and to promote a sense of security amongst the people living in the border areas, SSB has been deployed along these borders. To meet the operational requirements of Border Guarding Forces as well as to facilitate socio-economic development of border areas, the development of border infrastructure is imperative. The Govt. has sanctioned construction of border roads along the INB.

5. Indo-Myanmar Border (IMB):

India shares a porous border with Myanmar that spans across Arunachal Pradesh (520 km), Nagaland (215 km), Manipur (398 km), and Mizoram (510 km). Though the border between India and Myanmar is properly demarcated, its porous nature of border is a great threat to border security. More than 7.50,000 people live along the Indo-Myanmar border within a zone of 16 km; they can cross the border at any time without any visa restrictions under 16 Km Free Movement Regime (FMR) with the facility of Border pass.

BORDER GAURDING FORCES (BGFs) OF INDIA

1. Border Security Force (BSF)



Figure 2.6 BSF Logo and Uniform (www.bsf.nic.in/)

Motto of the BSF is *“Duty Unto Death”*.

The Border Security Force (BSF) is a Border Guarding Force of India. Established on December 1, 1965, it is a paramilitary force charged with guarding India's land border during peace time and preventing transnational crime. It is a Union Government Agency under the administrative control of Ministry of Home Affairs. It is one of many law enforcement agencies of India. It currently stands as the world's largest border guarding force.

Till 1965 India's borders with Pakistan were manned by the State Armed Police Battalion. Pakistan attacked Sardar Post, Chhar Bet and Beria Bet on 9 April 1965 in Kutch. This exposed the inadequacy of the State Armed Police to cope with armed aggression due to which the Government of India felt the need for a specialized centrally controlled Border Security Force, which would be armed and trained to man the International Border with Pakistan. As a result of the recommendations of the Committee of Secretaries, the Border Security Force came into existence on 01 Dec 1965.

2. Indo-Tibetan Border Police (ITBP)

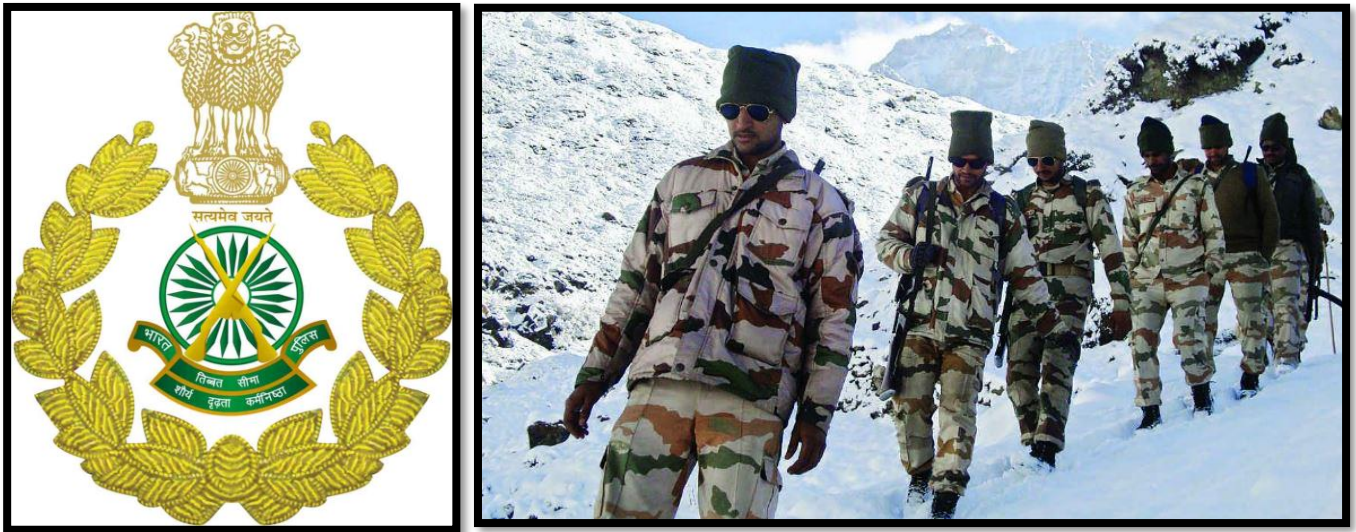


Figure 2.7 ITBP Logo and Uniform (www.itbpolice.nic.in/)

Motto of the ITBP is “*Valour – Determination – Devotion to Duty*”.

Indo-Tibetan Border Police was raised on October 24, 1962 for reorganizing the frontier intelligence and security set up along the Indo-Tibetan border. Only four Battalions were sanctioned to begin with. ITBP was initially raised under the CRPF Act. However, in 1992, parliament enacted the ITBPF Act and the rules there under were framed in 1994.

With additional tasks entrusted to ITBP from time to time on border guarding, counter insurgency and internal security roles, the number of ITBP Battalions increased gradually. In the year 2004, in pursuance of GoM recommendations on “One Border One Force”, the entire stretch of India-China Border comprising 3488 Kms was assigned to the ITBP for Border Guarding duty and, accordingly, ITBP, replaced Assam Rifles in Sikkim and Arunachal Pradesh in 2004.

3. Sashastra Seema Bal (SSB)



Figure 2.8 SSB Logo and Uniform (www.ssb.nic.in/)

Motto of the SSB is “*Service, Security and Brotherhood*”.

The Special Service Bureau (now Sashastra Seema Bal) was conceived in November 1962 and eventually created in March 1963 with the sole objective of achieving ‘*Total security preparedness*’ in the remote border areas for performing a ‘stay-behind’ role in the event of a war. SSB was started in North Assam, North Bengal, hill districts of Uttar Pradesh (now Uttarakhand), Himachal Pradesh, part of Punjab and Ladakh area of J&K.

SSB is now spread along the International border across Uttarakhand, UP, Bihar, West Bengal, Sikkim, Assam, and Arunachal Pradesh. SSB’s present charter of duties is to:

- Safeguard the security of assigned borders of India and promote sense of security among the people living in border areas.
- Prevent trans-border crimes, smuggling and any other illegal activities.
- Prevent unauthorized entry into or exit from the territory of India.
- Carry out civic action programme in responsibility.
- Perform any other duty assigned by the Central Government. (SSB is being deployed for Law & Order, Counter Insurgency Operations and Election duty).

4. Assam Rifles (AR)

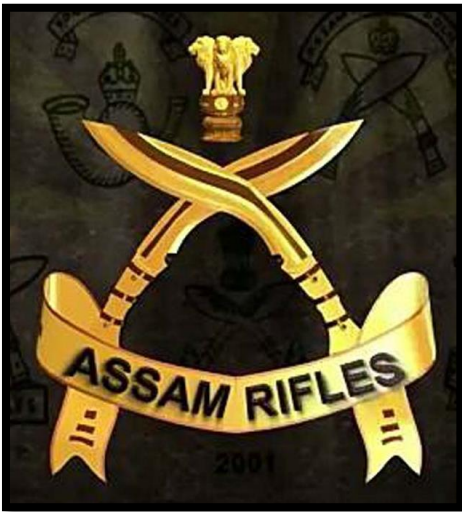


Figure 2.9 Assam Rifles Logo and Uniform (www.assamrifles.gov.in/)

Motto of the AR is “*Sentinels of the North East*”.

Assam Rifles (AR) is the oldest paramilitary force in India whose primary role is to protect part of India 's North-eastern border. It also maintained law and order in the tribal areas of Assam, a role now being performed by to the police forces in the States and Union Territories in North-eastern India.

The Assam Rifles was raised as the Cachar Levy, a semi-military force in 1835. Since then it has been used for extending administrative control over remote tribal areas in difficult conditions with at a nominal pecuniary cost. In 1917, it came to be known by its present name, in recognition of its contribution to the First World War. Later, it earned greater laurels in the Second World War and provided soldiers to the various British Indian Army Gurkha regiments, a process which resulted in permanent affiliations of the battalions of the AR to different groups of the Gorkhas.

Prior to 1965, this force was under the Ministry of External Affairs who were looking after NEFA affairs. It was transferred to the Ministry of Home Affairs when the latter took over this responsibility. Most of the Assam Rifles units are under the operational control of the Army and administrative control of MHA. AR battalions are proficient in counter-insurgency operations, where (also in J&K) their performance has been better than those of the Army/Rashtriya Rifles. They are especially good in un-orthodox small-scale missions to seek and destroy/apprehend hostiles.

5. Indian Coast Guard (ICG) & Marine Police

The responsibility for security of the coastal borders lies with the ICG with the **Coastal State (Marine) Police** acting as the second line for coastal patrol.



Figure 2.10 Indian Coast Guard Logo and Force (www.joinindiancoastguard.gov.in)

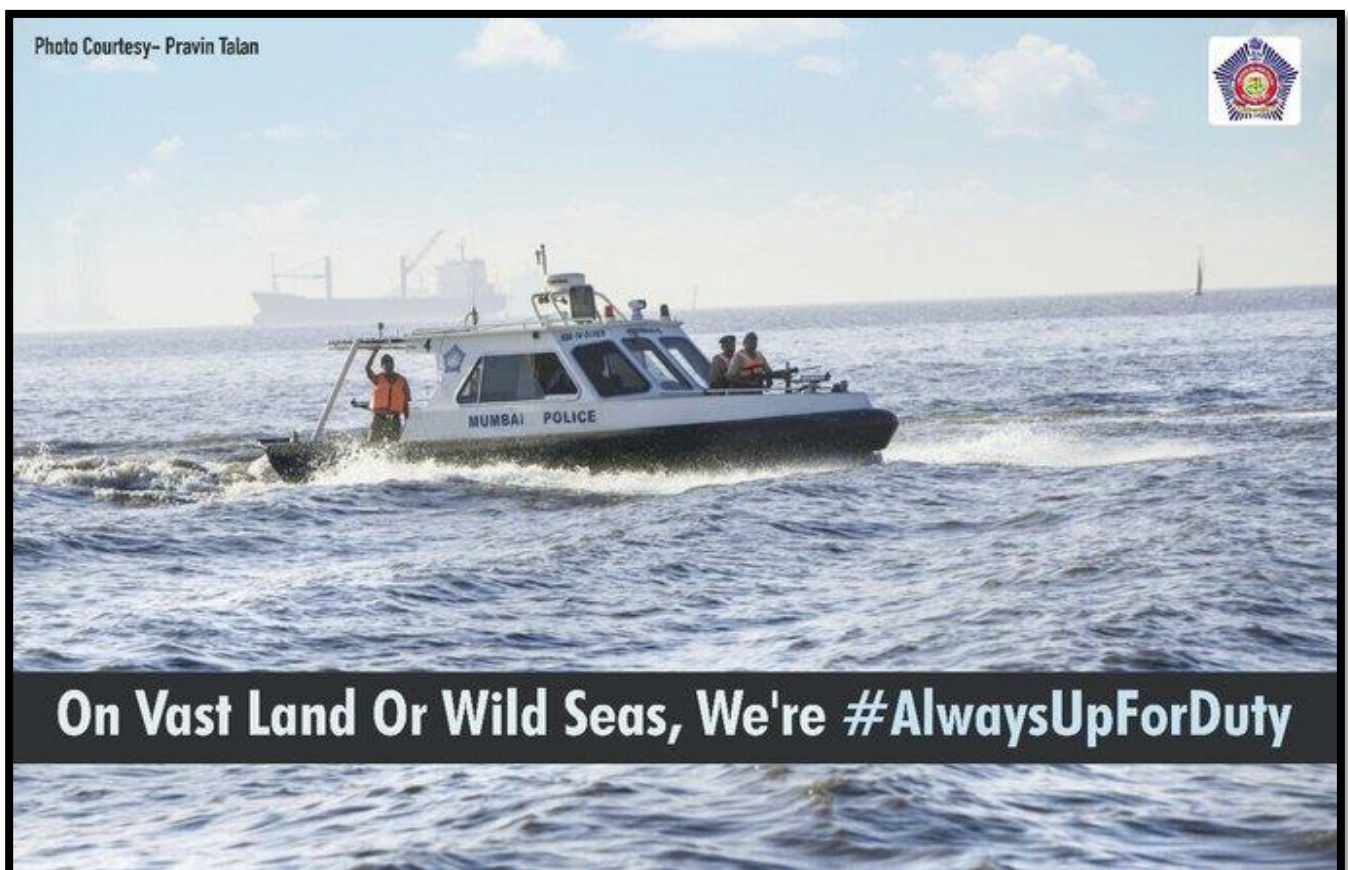


Figure 2.11 Mumbai Marine Police (Official Twitter Handle @MumbaiPolice)

2.2. BORDER SECURITY AND INFRASTRUCTURE

With a view of ensuring effective vigilance and security along the borders, Indian Government deploy a suitable mix and class of high-tech electronic equipment along the borders which act as a force multiplier for effective management. The border guarding forces make use of surveillance systems like night vision devices, hand-held thermal imagers, battlefield surveillance radars, etc. for deployment.

The main components of Border Infrastructure are as the following:

1. BORDER OUT POSTS (BOPs)

Border Out Posts (BOPs) are the main workstation of the BSF along the borders. These are self-contained defence out-posts with a specified area of responsibility established along the entire continuum of land borders. Inter-alia, the BOPs are meant to provide appropriate show of force to deter trans-border criminals, infiltrators, and the hostile elements from indulging in the activities of intrusion/ encroachment and border violations. Each BOP is provided with the necessary infrastructure for accommodation, logistic supports, and combat functions.



Figure 2.12 Glimpse of Border Outposts along Indo-Bangladesh Border (MHA Annual Report 2017-18)



Figure 2.14 Glimpse of Border Outposts along Indo-Bangladesh Border (MHA Annual Report 2015-16)



Figure 2.15 Glimpse of Border Outposts along Indo-Bangladesh Border (MHA Annual Report 2018-19)



Figure 2.13 Glimpse of Composite BOP (MHA Annual Report 2015-16)

2. BORDER FENCE

To curb the infiltration, smuggling and other anti-national activities from across the Indo-Bangladesh Border, the Government has undertaken the construction of fencing along this border.

The Indo-Bangladesh Border is marked by a high degree of porosity and the checking of illegal cross border activities and illegal migration from Bangladesh in to India have been major challenges. To prevent illegal migration and illegal activities including anti-national activities from across the border, the Government of India had sanctioned the construction of border fencing with floodlights in two phases. The stretches where physical fence is not feasible will be covered by technological Solutions.



Figure 2.16 Fencing constructed along Indo-Bangladesh Border (MHA Annual Report 2009-10)



Figure 2.17 Gates provided in border fencing on Indo-Bangladesh border (MHA Annual Report 2005-06)



Figure 2.18 Border Fencing at Indo-Bangladesh Border in Shillong Ftr. (MHA Annual Report 2011-12)

3. BORDER ROADS

Border roads are constructed and maintained by CPWD, Border Roads Organization (BRO), Government of India undertakings and State govt. agencies. BRO was established in 1960 for the development of the roads of strategic importance.



Figure 2.19 Border Road under construction (MHA Annual Report 2015-16)



Figure 2.20 Construction of border roads (MHA Annual Report 2015-16)

4. BORDER FLOODLIGHTS

The Border floodlights are another important element in border management. It helps border-guarding forces in keeping strict vigil in the forward areas and check infiltration attempts by terrorists and illegal immigrants.



Figure 2.21 Floodlighting along Indo-Bangladesh border (MHA Annual Report 2018-19)

(Continued)



Figure 2.22 Floodlighting along the Indo-Pakistan border (MHA Annual Report 2011-12)



Figure 2.23 Fencing & floodlighting constructed along Indo-Pakistan border (MHA Annual Report 2007-08)

COMPREHENSIVE INTEGRATED BORDER MANAGEMENT SYSTEM (CIBMS)



Figure 2.24 A glimpse of Smart Fencing (IDSA website)

The CIBMS

The CIBMS is touted as a more robust and integrated system that can address the gaps in the present system of border security by seamlessly integrating human resources, weapons, and high-tech surveillance equipment. This is a first of its kind technology being implemented for border guarding.

The CIBMS consists of integration of the following: -

1. Manpower
2. Sensors
3. Network
4. Intelligence and command & control solution
5. Radars
6. EO sensors & other devices.

Ministry of Home Affairs (Border Management Division) has been exploring the deployment of technology solutions for improved border surveillance with a view to reduce/eliminate incidents of infiltration, smuggling or other illegal cross-border activities in various terrains along IPB and IBB, esp. in challenging areas where fencing could not be installed due to difficult terrains.

These technological solutions will target primarily, the challenging areas like:

- Riverine, delta and estuary areas
- Waterlogged and swampy area
- Creek areas
- Plain areas vulnerable to heavy fog
- Thickly populated areas on the border
- Hilly areas
- Tropical jungle areas
- Deserts

Present Status

At present, a pilot project has been completed along two stretches in the Jammu sector (5 kms each total 10 kms) of the India-Pakistan border. Technical evaluation of the projects has been completed. Further, a project for deployment of technological solutions in one stretch in Dhubri, Assam (61 km) along Indo-Bangladesh Border is being implemented by BSF which is in advanced stage of completion and likely to be completed by 2021.

Existing System of Border Guarding

The BGFs have been provided with night surveillance capabilities such as Passive Night Vision Goggles (PNG), Night Weapon Sights (NWS), Hand Held Search Lights (HHSL), Hand Held Deep Search Metal Detectors (HHMD), etc. In subsequent years, as cross-border threats increased and the BSF also embarked on a modernisation process, the organisation acquired more sophisticated devices such as Hand Held Thermal Imagery (HHTI) systems, Long Range Reconnaissance Observation Systems (LORROS), Battle Field Surveillance Radars (BFSR), etc.¹ These equipment proved to be game changers and force multipliers by enhancing the detection capabilities of BSF personnel and resulted in many apprehensions.

¹ https://idsa.in/issuebrief/comprehensive-integrated-border-management-system_pdas_041017

2.3. BORDER SECURITY POLICY OF INDIA: AN OVERVIEW

Efficient border management and security entail the effective control and regulation of the movement of people and goods and are of exceptional importance for the country. The processes that define and control the regulatory strategy for the borders and help the government facilitate legitimate travel and trade while simultaneously preventing illegal migration, smuggling and infiltration of insurgents and terrorists are the defining features of our country's border management.

India's Border Management Strategy

India's border management strategy has important elements: border guarding (between ports of entry), border regulation (at the point of entry), development of border areas, and bilateral institutional mechanisms to resolve border disputes and iron out conflicts with neighbors.²The main element of India's border management strategy is the physical guarding of the border between the various designated ports of entry. For this purpose, it deploys border guarding forces and erects barriers, mainly in the form of fences. Beginning in 2001, different border guarding forces have been assigned to different borders.

Another main element of India's border management strategy is regulation of the cross-border movement of people and goods that takes place through designated transit points. Lack of coordination among various agencies such as customs, bureau of immigration, the narcotics control bureau, state police, etc., is yet another hindrance. Basically, two important tenets form the bedrock of border management processes in India, firstly, porousness of borders for legitimate trade and movement of persons, and, secondly, non-porousness of borders for all anti-state activities.

Presently, border security policy of the country cover security of trade and people, border areas, border points and operational facets. Border security of the country is entrusted to the BGFs and Armed Forces, which include the army, navy, and air force during wartime. However, during peace time, it is the paramilitary forces/BGFs such as the Border Security Force (BSF), Indo-Tibetan Police Force (ITBP), Assam Rifles (AR), and Sashastra Seema Bal (SSB) operating on land borders and Indian Coast Guard

² http://www.ipcs.org/comm_select.php?articleNo=351

in coastal areas. Intelligence agencies provide inputs to border management organisations to deal with counterintelligence and counter insurgency.

‘One Border, One Border-Guarding Force’

The principle of ‘**One Border, One Border-Guarding Force**’ is followed by the Government of India.

Border management, however, is an integral part of country’s military security and demands proactive intelligence, inclusion of modern technology, and coordinated action by bureaucrats, politicians, economic agencies, security personnel and other related stakeholders of the country in order to safeguard the borders from any kind of infiltration and foreign aggression.

Thus, our border management processes are an integrated one with a large set of activities aimed at solving the strategic and practical challenges at the borders. One of the main process as part of border management in our country is the coordination within services i.e., proper communication and integration across ministries such as the Ministry of Defence and Ministry of Home Affairs. Another process is the coordination between services i.e., coordination between services involves armed forces, ministries, and other stakeholders responsible to provide border management services. This is characterized by daily operational contacts at border crossings both at formal and informal levels. Coordination is required to pave the way for an optimal solution for practical matters, such as harmonisation of politics and practices when necessary, development and funding of new infrastructure and IT services, and the development of common training for the existing and new personnel.

International coordination is the last main process which plays an important role in ensuring effective border management. Bilateral cooperation among neighbouring countries and multinational cooperation aimed at issues relating to border management.

The approach developed by the Government of India for border management combines security and commerce into a single system that supports the national priorities of the country, as well as the political, economic, social, and cultural needs of the population. In most cases, building a seemingly impenetrable wall would violate this principle and could do significant damage to the informal economies that exist within border communities. Creating a balance between security and commerce is essential. This includes developing solutions that account for the movement of goods and people that have long linked border communities.

2.4. BEST PRACTICES ACROSS THE GLOBE

BORDER MANAGEMENT ACROSS THE WORLD: SELECT CASE STUDIES AND LESSONS FOR INDIA

Border management is a security function that calls for coordination and concerted action by various government agencies within our country. The aim is to secure our frontiers and safeguard our nation from the risks involved in the movement of goods and people from India to other countries and vice versa.

India has an exceptionally long and complex border, covering around 15,106.7 km, which it shares with Bangladesh, China, Pakistan, Nepal, Myanmar, and Bhutan, as well as a small portion with Afghanistan. What further increase the complexity and criticality are the varied terrain, climatic conditions, and relationship with some of the neighbouring countries.

Not Every Border Is Same

While each border is unique and solutions cannot be applied in a rote manner from one country to the next, commonalities exist that provide insights and lessons learned that can be factored into a nation's border management approach. Command, control, and communications that allow for interactions and coordination among various interagency organizations and from the national to the local level are imperative to border solutions. While technology and equipment can be important additions to any border management system, they are only effective if properly incorporated into planned operational efforts, if life-cycle support and costs are provided (either through national resources or partner-nation support), and if cultural sensitivities are considered in their use.

Several countries have their own principles of border management. Following countries' border management system are analysed further.

Jordan



Figure 2.25 Jordan's Border (BBC website)

Jordan has built long surveillance towers along a 30-mile-long stretch bordering Syria. Complimenting it is the long fully networked fencing which runs along Jordan's borders with Syria and Iraq. The border management of Jordan comprises of an advanced border monitoring

network, equipped with an array of remote detection, surveillance, and command and control capabilities, which allowed the Jordanian Armed Forces to detect activity five miles away on either side of the fence. From Jordan border management, **India can rightly learn that command, control, and communications technology are crucial for an integrated border management system. We can enhance the operational capability of the armed forces by following Jordan's border management practice. It is required especially on the Indo-Pak and Indo-China borders which remain the hotspots of infiltration.**³

Saudi Arabia



Figure 2.26 Saudi Arabia's Border (BBC website)

Saudi Arabia is an apt example of how border management can be effective in the desert areas, learning from the Saudi Arabian border management practice can come handy for the Indian armed forces patrolling the desert areas of the Indo-Pak border. Saudi Arabia has never been a stable country owing to the internal

terrorist attacks and minority issue. **From Saudi Arabia, India can learn that border management entails border security which is a part of the broader anti-terrorism portfolio and not just military attacks by a country over other. For shifting sand dunes problem, India can take a clue from Saudi Arabia that the solution lies in the construction of various layers of fencing with barbed wire.**⁴

³ https://www.vice.com/en_us/article/pa4vqz/the-great-wall-of-jordan-how-the-us-wants-to-keep-the-islamic-state-out

⁴ <https://gulfnews.com/world/gulf/saudi/saudi-arabia-building-hi-tech-border-fence-1.1445112>

Niger



Figure 2.27 Niger's Border (BBC website)

Niger presents another successful example of border management; the government went deep into developing the control command at its overly sensitive northern desert zone. With good governance and development projects at the local level (empowering the local

population), Niger was able to implement the successful model of border management.⁵ However, it was aided by the US in its border management program. What India can learn from Niger is that community mobilisation can be used by instilling a sense of ownership in the local population which in turn empower them.⁶

Morocco



Figure 2.28 Morocco's Border (BBC website)

Morocco's unique geopolitical position has given its borders an outsized prominence in regional relations. For securing its borders, it has a series of mined and barricaded sand berms running from the southwest to the northeast of the disputed Western

Sahara. Additionally, it used berms, the berm features 10-foot walls, barbed wire, electric fencing, and sentries every seven miles. India can learn to erect high walls along its international borders to safeguard its territories from foreign aggression. Thus, it is important to harden the border with a greater focus on the lives of local communities, security risks in surrounding border areas must be considered.⁷

⁵ <https://info.undp.org/docs/pdc/Documents/MRT/Border%20and%20communities%20Management%20Sahel.pdf>

⁶ <https://world-border-congress.com/iom-niger-immigration-and-border-management/>

⁷ Far from Prying Eyes, A Trap for Migrants and Refugees Militarisation of the Border between Algeria and Morocco, available at <http://euromedrights.org/wp-content/uploads/2015/12/20151218-EMR-Maghnia-Report-EN.pdf>

United States of America (USA)



Figure 2.29 USA's Border (BBC website)

US mastered the Coordinated Border Management (CBM)⁸ which represents an approach to manage borders involving public service agencies working across portfolio boundaries in a coordinated manner to achieve a shared goal thus providing a cohesive government response to the challenges of border

management. CBM can be referred to as meaning a logical way to manage border operations to ensure efficient and effective processes and procedures used by all regulatory agencies who are involved in border security and regulatory requirements that apply to travellers, goods and conveyances crossing international borders.⁹ The objective of a coordinated border management system is to facilitate trade and the clearance of travellers at the same time ensuring secure borders. Therefore, the CBM is viewed more as a guiding principle for the border agencies rather than a practical one-size-fits-all model.

New Zealand



Figure 2.30 New Zealand's Border (BBC website)

In New Zealand, the Border Sector Governance Group was established to oversee the implementation of CBM. Having identified border development objectives and deliverables, New Zealand undertook a whole of government approach to border management where

agencies remain separate, however work together to achieve common goals.¹⁰

⁸ https://unctad.org/meetings/en/Presentation/HermieGeorge_WCO_NTFCForum_Jan2017_2.pdf

⁹ <https://publications.iadb.org/publications/english/document/Interoperability-at-the-Border-Coordinated-Border-Management-Best-Practices--Case-Studies.pdf>

¹⁰ <https://mag.wcoomd.org/magazine/wco-news-82/border-management-modernization-in-new-zealand-forges-ahead/>

Countries with juxtaposed facilities for border management: Switzerland as the prime model

The most common arrangement is related to so-called juxtaposed facilities. This model is used where the border posts are in good condition or where there is a natural border, such as a mountain, a river, and so on. The main idea is that the exit country facilities are bypassed to carry out all necessary exit and entrance procedures in the entry country.¹¹ Another model can be described as a 'common one country facility'. It implies the physical location of the shared office on the territory of one of the countries thus allowing officers from both countries to carry out border controls together. This model is practical only in cases where trust and cooperation between the countries are strong.

Switzerland



Figure 2.31 Switzerland's Border (BBC website)

Being a landlocked country, Switzerland has established juxtaposed offices or the like at its land borders for over four decades. Switzerland concluded bilateral intergovernmental conventions and bilateral agreements with the

administrations of the neighbouring countries to comply with the principle of extraterritoriality in order for the officers of a country to work to their full capacity at the juxtaposed office on the territory of the other state. For instance, the bilateral convention of 1960 between Switzerland and France provides a legal basis to establish a juxtaposed office.¹²

¹¹ <https://www.doingbusiness.org/en/data/exploretopics/trading-across-borders/good-practices>

¹² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/546809/An-Inspection-of-Juxtaposed-Controls_Aug_2013.pdf

China



Figure 2.32 China's Border (BBC website)

China exists in a tough regional neighbourhood; it sees domestic and international security as linked along its borders. Its focus therefore is on maintaining stability along its borders and facilitating opportunities for economic exchange across the territorial

borders it shares with other sovereign states. In recent years, China has also come far toward completing a technologically sophisticated "border information integration system," launched nearly a decade ago beginning with Xinjiang, inner Mongolia and Yunnan, the provinces, and autonomous regions with the longest land borders. In addition, it has invested significantly in computerizing its border control for people entering and leaving China. Along with this technology, it has also invested in constructing new border port structures. Today, border crossings on the Chinese side are typically marked by large archways, known as "country doors" (guomen).¹³

Australia



Figure 2.33 Australia's Border (BBC website)

Australian border is a physical space, but it is much more than a line on a map defining where the government's sovereign power begins and ends. It is a complex construct that comprises a combination of connections, conditions, and control measures. Australia follows the policy

of off shore and on shore border management. Government authorities work ahead of the physical border to identify and manage risks, and authorisation is given to people to live in Australia considering how they contribute to the economy. The government has enforced the framework for movement of people and goods in and out of Australia. However, the striking point is the engagement of private entities in border management along with the public sector.¹⁴

¹³ China on the Edge China's Border Provinces and Chinese Security Policy, available at https://www.researchgate.net/publication/268981753_China_on_the_Edge_China's_Border_Provinces_and_Chinese_Security_Policy

¹⁴ Securing the Australian frontier, available https://www.files.ethz.ch/isn/194857/SR83_ASPI_Border_security_agenda.pdf

Table 2.1 Best Global Border-practices for consideration

S. No.	Country	Lessons for India
1	Australia	Engage PPP model in border management
2	China	Construction of border port structures for strengthening border integration and infrastructure
3	USA, New Zealand	Coordinated Border Management for effectively harnessing the coordination of different government agencies
4	Switzerland	Establish juxtaposed border offices or facilities with neighbouring countries with whom the country shares its borders
5	Morocco	High walls and berms should be used at the borders
6	Niger	Control command at overly sensitive zones lying on the border areas
7	Saudi Arabia	Construction of sand berms, a metal fence, a pyramid of barbed wire, ultraviolet sensors with facial recognition software, and observation towers every 100 yards on the borders
8	Jordan	Construction of surveillance towers around border to check infiltration and trespassing

Table 2.2 Good Practices that are Common for Border Management

S. No.	Good Practices that are Common for Border Management
1	Enhance intra-agency cooperation.
2	Enhance inter-agency cooperation.
3	Enhance international cooperation.
4	Develop and establish comprehensive remote border area surveillance programs.
5	Engage with and empower border communities as key contributors in border security and management.
6	Develop and implement border community policing programs.
7	Develop and implement border security and management information exchange programs and mechanisms.
8	Establish border cooperation centres.
9	Nominate and assign border liaison officers.
10	Conduct joint and coordinated cross-border patrols, as well as joint multi-agency and interdisciplinary operation exercises.

11	Define parameters for cross-border operational engagement.
12	Conduct effective risk analysis assessments.
13	Create national border management strategies and action plans.
14	Establish joint border crossing points.
15	Identify corruption as a serious risk for effective and robust border security and management.

Table 2.3 Measures taken by Government of India for effective border management

S. No.	Focus Area	Details of work undertaken for border management
1	Roads	Construction of roads along the Indo- Bangladesh, Indo-Pakistan, Indo-Myanmar, Indo-China, Indo-Nepal, and Indo-Bhutan borders.
2	Fencing	Construction of fencing along the Indo-Bangladesh, Indo-Pakistan, and Indo-Myanmar borders & Technological solutions along Indo Pakistan and Indo Bangladesh Borders.
3	Floodlighting	Construction of floodlighting along the Indo-Bangladesh, Indo-Pakistan, and Indo-Myanmar borders
4	Border Out Posts (BOPs)	Construction of Border Out Posts on the borders and strengthening of the weaker BOPs.
5	Other security measures	Installation of high-tech surveillance equipment on the international border.

Table 2.4 Systems that could be adopted for Border Management

S. No.	Facilities	Sensors	Aerial Systems	Operational Concepts	Other Capabilities
1	Command and control nodes at national, regional, and local levels	Camera surveillance systems	Border patrols	Government unity of effort (taking state government too in enforcing border security)	Targeting systems for border management
2	Fusion centers	Radar and sonar	Persistent Surveillance System/Aero-satellites	Real-time information sharing among agencies responsible for border management	Incorporation of intelligence into border operations, including human intelligence
3	Real-time, assured communications; fixed and mobile communications	Unattended ground sensors for tipping and cueing	Overhead imagery for coherent change detection	Mobile patrolling	Early warning systems
4	Obstacle plans (walls, fences, berms, barriers)	Biometric screening	Unmanned aerial systems at all levels (national, regional, and local/unit) for a variety of missions	Rapid resolution of traveler/ trade status	Quick-reaction forces in the form of BSF, AR, ITBP, SSB
5	Fixed and mobile observation towers				Predictive analytics for targeting

Table 2.5 Technology infrastructure upgradation

S. No.	Areas for Intervention	Potential Solutions	Potential Benefits
1	Predicting Illegal Immigrants	<ul style="list-style-type: none"> Immigrant risk analysis using social media insights and Biometric records Preventing immigration fraud by checking groups of people involved in past illegal movement across the border Complete checks at Entry and Exit points across the border Use of Artificial Intelligence to detect cross-border crimes 	Speed up, facilitate, and reinforce border- check procedures for foreign nationals
2	Achieving operational excellence at reduced costs	Leveraging Internet of things	Improvement of screening and tracking of goods entering country

Table 2.6 For enhancing surveillance systems at borders

S.No.	Areas for Intervention	Potential Solutions	Potential Benefits
1	There should be a Smart Inspection System in place at Border areas to allow only legitimate people to indulge in licit trade	<ul style="list-style-type: none"> • Complete installation and Maintenance system for advance scanning technologies 	<ul style="list-style-type: none"> • It will save time in detecting illegal weapons, drugs entering the country
2	Surveillance drones or the unmanned aerial vehicles have not been used to their full potential due to restricted flight space	<ul style="list-style-type: none"> • Optimal air space is the key for utilising flight trajectories to prevent any aerial attack or to check on the activities happening at the borders 	<ul style="list-style-type: none"> • High flying drone must be equipped with a high accuracy satellite-based augmentation system to track cross border crimes
3	Leveraging surface radars system	<ul style="list-style-type: none"> • Using AI to keep a tab on sensitive border out posts 	<ul style="list-style-type: none"> • It will help in identification of main points of intrusion by foreign elements • It will help in mapping the threats analysis
4	Encryption of data in the best manner during communication from command centre to border out posts or vice-versa	<ul style="list-style-type: none"> • Using Internet of Things to ensure smooth data transmission across a wide number of self-encrypting devices 	<ul style="list-style-type: none"> • It will help in better computation and intelligence sharing
5	Extreme weather conditions at border areas at times make surveillance a challenging task for the Border Guarding Forces	<ul style="list-style-type: none"> • A good solution is the development of Weather Forecasting Models in collaboration with Indian Meteorological Department (IMD) 	<ul style="list-style-type: none"> • Understanding the weather in advance would help the security forces to prepare for the effects of the weather

CHAPTER 3:

DATA ANALYSIS AND FINDINGS

3. DATA ANALYSIS AND FINDINGS

3.1. FUND ALLOCATION UNDER BIM

1. YEARLY FUND ALLOCATION AND UTILIZATION

Table 3.1 Allocation and Expenditure on BIM Scheme during 2017-2020 (in Crore)

Allocation and Expenditure on BIM Scheme during 2017-2020 (Rs. in Crore)					
S. No.	Year	Demand	Allocation by CCS	Final Budget Allocation	Expenditure
1	2017-2018		2600	2039.84	2005.55
2	2018-2019		2860	2000.98	2030.42
3	2019-2020		3146	2117.21	2153.13
TOTAL	2017-2020	17,048	8606	6158.03	6189.1

Observations:

Table 3.1 represents the Year-wise Fund Allocation and Expenditure details of the BIM Scheme. The demand as projected by the Department of Border Management to the Expenditure Finance Committee (EFC) was Rs. 17,048 Crores for the period 2017-2020. As against this, the final budgetary approval by the EFC & Cabinet Committee on Security (CCS) was Rs. 8606 Crores for the period of three years between 2017-2020. Of this, the final allocation as represented in the table turned out to be Rs. 6158.03 Crores. While the total expenditure for the period 2017-2020 was Rs.6189.10 Crores.

The Budgetary allocations and expenditures under different Border Works have been described and analysed further in the next sections.

FUND ALLOCATION AND EXPENDITURE DURING 2017-2020 (IN CRORES)

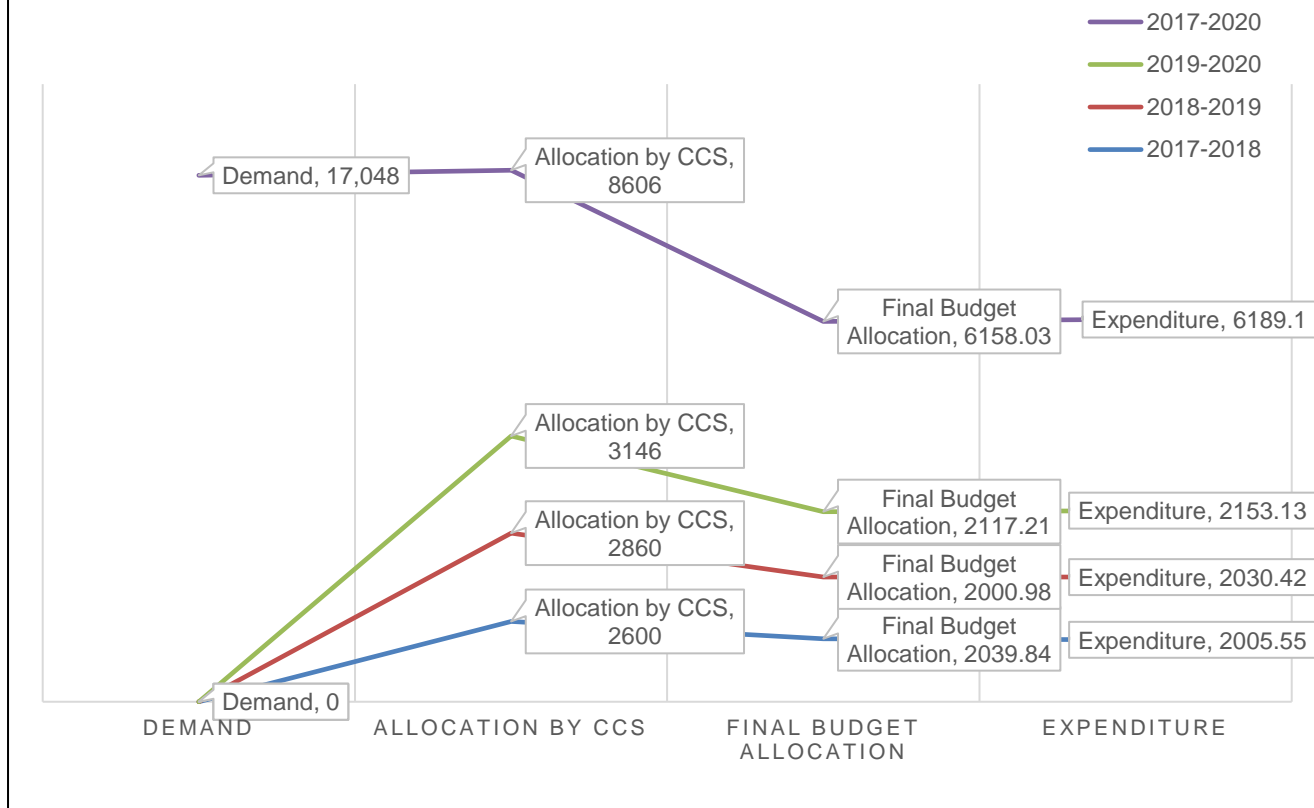


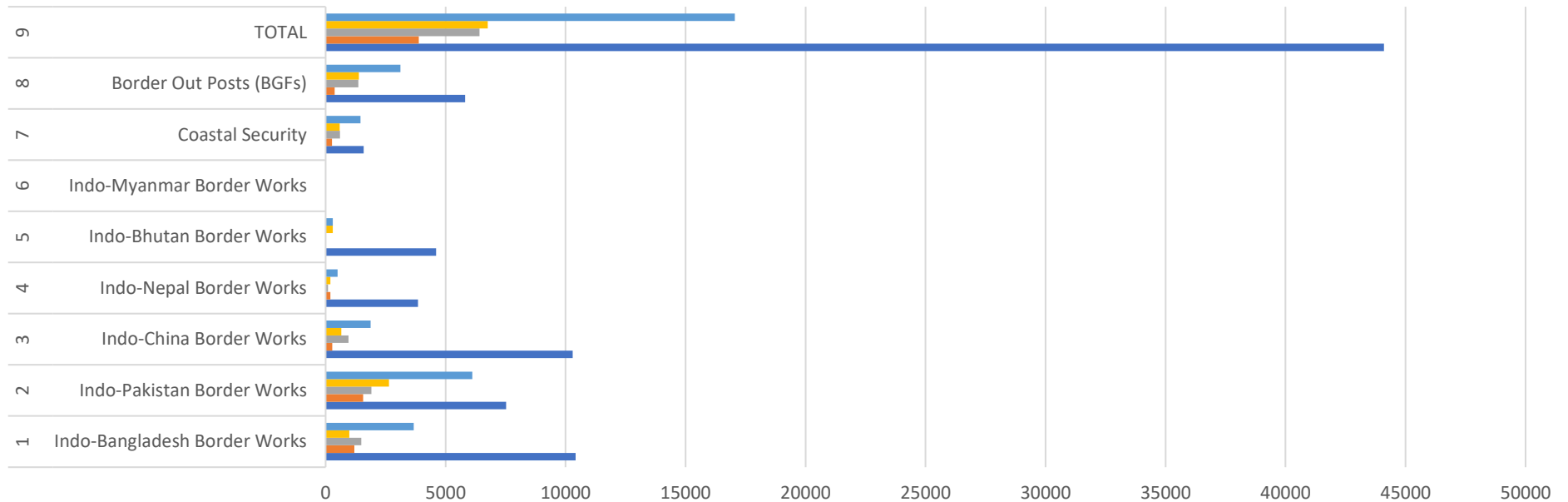
Figure 3.1 Graph Representation of Year-wise Fund Allocation and Expenditure under BIM

Observations:

The Figure 3.1 graphically represents the Fund allocation and expenditure under the BIM Scheme for each financial year beginning from 2017 to 2020. The violet line represents the total allocated and expenditure amount as against the demand raised by the DoBM for the same period.

As noticeable, the final amounts differ from the allocated amount decided by the Cabinet Committee on Security. Meanwhile, the expenditure amount also differs from the final allocated amount as sanctioned. The final allocated and sanctioned amounts differ as in-principle approvals by Ministry of Finance are based on previous scheme/projects appraisals and expenditure trends.

PROJECTED FINANCIAL OUTLAY - DISTRIBUTION GRAPH FOR 2017-2020



	1	2	3	4	5	6	7	8	9
	Indo-Bangladesh Border Works	Indo-Pakistan Border Works	Indo-China Border Works	Indo-Nepal Border Works	Indo-Bhutan Border Works	Indo-Myanmar Border Works	Coastal Security	Border Out Posts (BGFs)	TOTAL
Total during 2017-2020	3670.67	6110.21	1879.05	500.92	302	15	1450.89	3119.98	17048.72
Expenditure during 2019-20 (Projected)	991.22	2638.26	655.79	200	300	0	589.58	1382.37	6757.22
Expenditure during 2018-19 (Projected)	1481.35	1911.51	950.31	100	1	0	600	1365.42	6409.59
Expenditure during 2017-18 (Projected)	1198.1	1560.44	272.95	200.92	1	15	261.31	372.19	3881.91
Total Cost of projects	10418	7524.17	10291.99	3853	4600	15	1579.91	5816.77	44099.72

■ Total during 2017-2020 ■ Expenditure during 2019-20 (Projected) ■ Expenditure during 2018-19 (Projected) ■ Expenditure during 2017-18 (Projected) ■ Total Cost of projects

Figure 3.2 Projected Financial Outlay for 2017-2020

ALLOCATED FINANCIAL OUTLAY (2017-2020) (RS. IN CRORES)

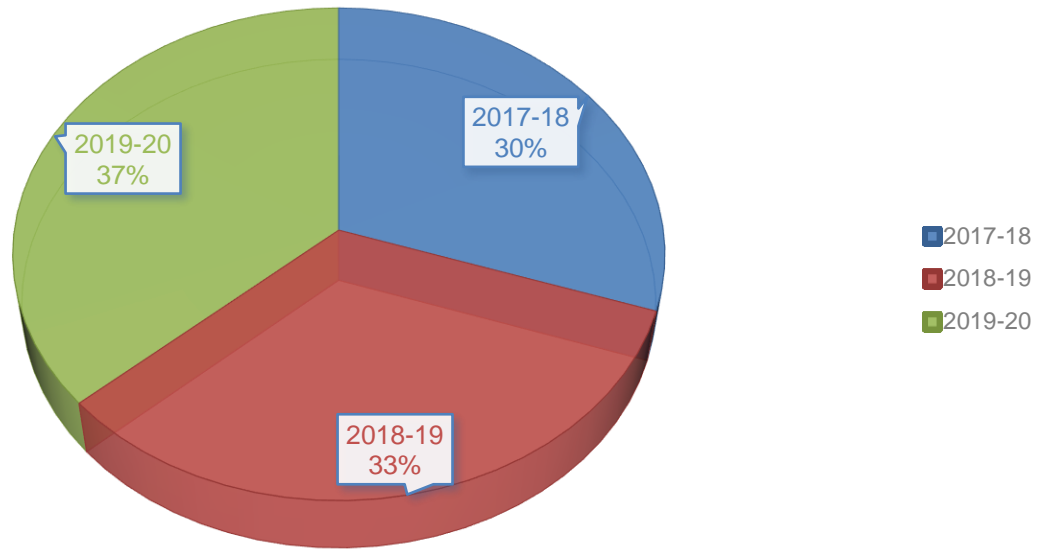


Figure 3.3 Allocated Financial Outlay Percentage Distribution for 2017-2020

Observation:

The Figure 3.3 represents the percentage distribution of the total fund allocation that is Rs. 8606 Crores under BIM Scheme for the period 2017-2020.

The above pie-chart highlights the year-wise break-up of the total amount. The highest allocation from the total outlay was done in the FY 2019-2020. While the lowest allocated amount in a FY was done in 2017-2018 when the BIM Scheme was launched.

Table 3.2 Border-wise Yearly Fund Allocation

S.No.	Border	Project Status	Fund Allocation (Rs. In Crores)			
			2017-18	2018-19	2019-20	TOTAL (2017-20)
1	Indo-Pakistan Border Works	Ongoing	210.36	404.67	249.10	864.128
		New	-	8.49	36.15	44.64
2	Indo-Bangladesh Border works	Ongoing	1006.16	989.63	586.3	2582.09
		New	122.27	158.05	293.9	574.22
3	Indo-China Border Works	Ongoing	206.42	252.28	264.40	723.10
		New	-	10.07	78.87	88.94
4	Indo-Nepal and Indo-Bhutan Border Works	Ongoing	257.10	101	116	474.10
		New	15.54	80	84.24	179.78
5	Indo-Myanmar Border Works	Ongoing	5	6.27	20	31.27
		New	-	-	-	-
6	Coastal Security Scheme (Phase-II)	Ongoing	16.31	341.02	666.22	1023.55
		New	-	-	-	-
	TOTAL	Ongoing	1701.35	2094.87	1902.02	5698.24
		New	137.81	256.61	493.16	887.58

Observations:

The Table 3.2 represents the year-wise break-up of fund allocations under different Ongoing and New projects.

As the data suggests, the highest allocation under the **Ongoing Projects** has been made for the Indo-Bangladesh Border meanwhile the Coastal Security Scheme (Phase-II) has been allocated the second highest amount. The final total amount allocated under all the Ongoing projects for all borders and CSS is Rs. 5698.24 Crores.

As the data suggests, there was no fund allocated under **New Projects** for the Indo-Pakistan Border and Indo-China Border in the FY 2017-2018. Further, there was no final allocation under New Projects for the Indo-Myanmar Border. No allocation has been made for the Coastal Security Scheme (Phase-II) under the New projects. The final total amount allocated under all the New projects for all borders and CSS is Rs. 887.58 Crores.

3.2. BORDER WISE PROJECT DETAILS

1. INDO-CHINA BORDER WORKS

Table 3.3 Indo-China Border Work – Fund Allocation (Ongoing Projects)

Indo-China Border Work – Fund Allocation (Ongoing Projects)													
S. No.	Name of Project	Approved Cost	Anticipated / Approved Revised Cost	Expenditure as on 31.03.17	Allocation Year Wise (Rs.in Crore)				Spill over beyond 2019-20	Status/ PDC	Cost Overrun (Current) (Cr.)	Funding Requirement that may arise after March 2020	Project Status
					2017 -18	2018-19	2019-20	Total (2017-20)					
1	Construction of Infrastructure at 141 old ITBPs BOPs	82.8	82.8	37.01	10	14.81	9.29	34.1	11.69	Dec-20	No	11.69	Under Progress
2	Development of Infrastructure at 35 Nos ITBP BOPs	587.45	587.45	35.86	4.08	7	3.71	14.79	536.8	Mar-23	No	536.8	Under Progress
3	Construction of 25 roads (ICBR-I)	2324	3482.52	2086.22	189.68	228.22	247.8	665.7	730.6	Dec-20	No	730.6	Under Progress
4	Third Party Inspection	19.22	19.22	11.95	1.66	0.69	0	2.35	4.92	Mar-21	No	4.92	Under Progress

5	Maintenance of roads	19.08	19.08	0.38	1	1.56	3.6	6.16	12.54		No	12.54	Under Progress
	TOTAL	3032.55	4191.07	2171.42	206.42	252.28	264.4	723.1	1296.55			1296.55	

Observations:

The table 3.3 depicts the details of all the ongoing projects on the Indo-China Border, their year-wise fund allocation and utilization-distribution and cost-overrun. As the data suggests, there has been no cost-overrun for either of the project. All the projects are currently under progress.

Table 3.4 Indo-China Border Works- Fund Allocation (New Projects)

Indo-China Border Works- Fund Allocation (New Projects)										
S.No.	Name of the Project	Approved Revised/ New Project Cost	Allocation (Year- wise) (Rs. In Crores)				Status/ PDC	Cost Overrun (Current) (Cr.)	Funding Requirements that may arise after March 2020	Whether project is to be taken up/ dropped
			2017-18	2018-19	2019-20	Total (2017-20)				
1	Construction of 47 Roads (ICBR-II)	19898	0	0	0	0			19898	Under progress
2	Construction of Marsimik la-Hot Spring Road	153.085	0	10.07	34.02	44.09	Dec-20		108.995	Under progress
3	Construction/Upgradation of Helipads	208.41	0	0	12	12	Mar-24		196.41	Under progress
4	Development of critical infrastructure in Arunachal Pradesh	1175.54	0	0	0	0	Mar-24		1175.54	Under progress
5	Construction of Integrated building for 96 ITBPs BOP	1923.62	0	0	0	0	Mar-24		DPR under preparation	Under progress

6	Project for Solar Power Plant at 23 BOPs for ITBP	3.64	0	0	0	0	Mar-21		3.64	Under progress
7	Infrastructure development in BOPs staging camps, shellers etc. including land acquisition.	704.44	0	0	32.85	32.85	Mar-23		677.15	Under progress
	TOTAL	24066.735	0	10.07	78.87	88.94			23977.795	

Observations:

The Table 3.4 depicts all the details of the new projects currently under progress or in process of being taken-up on the Indo-China Border, their year-wise fund allocation and cost-over run. At present, all the projects are under progress.

Table 3.5 Indo China Border Works – Physical and Financial Status Data (Ongoing Projects)

Indo China Border Works – Physical and Financial Status Data (Ongoing Projects)											
S. No.	Name of the Project	Km(s)/ Number(s) Sanctioned	Approved by	Approved cost	Revised cost (if any)	PDC/ Revised PDC/ Updated PDC	Financial Progress		Physical Progress		Reasons for delay/Remarks (if any)
							Expr till 31.03.2020	% expr	In No./Km	In % as on 31.03.2020	
1	Construction of Infrastructure at 141 old ITBPs BOPs		CCS	82.8		Mar-20	54.45	66.00 %		68.00%	The project is near completion, Shortage of availability of resources/firms. Limited Working season.
2	Development of infrastructure at 35 Nos ITBP BOPs		CCS	587.45		Mar-23	83.67	14.00 %		11.00%	Land issues in border areas yet to be resolved/finalized. Shortage of availability of resources/firms. Limited Working season.
3	Construction of 25 roads (ICBR-I)	751.58 km	CCS	3482.52		Dec-20	2751.07	79.00 %	535.50 km	71.23%	92.80% Formation cutting completed. Surfacing is being done. Limited working season.
4	Third Party Inspection		CCS	19.22		Mar-20	14.3	74.40 %			Third party inspection/maintenance of

5	Maintenance of roads	751.58 km	CCS	19.08		Mar-20	6.54	34.27 %			completed roads are continuous process
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Observations:

The Table 3.5 depicts the Physical and Financial status (in range and percentage) of ongoing projects on the Indo-China Border, their Approval authorities, status, and the reasons of delay. As data suggests, there has been delay in completion of 4 of the 5 projects. All the projects are currently under progress. The major reasons of delay as highlighted in the table are:

- Shortage of availability of resources/firms.
- Limited working seasons due to climatic and terrain conditions.
- Land acquisition issues on the border areas.

Table 3.6 Indo China Border Works – Physical and Financial Status Data (New Projects)

Indo China Border Works – Physical and Financial Status Data (New Projects)											
S. No.	Name of the Project	Km(s)/ Number(s) Sanctioned	Approved by	Approved cost	Revised cost (if any)	PDC/ Revised PDC/ Updated PDC	Financial Progress		Physical Progress		Reasons for delay/Remarks (if any)
							Expr till 31.03.2020	% exp	In No./Km	In % as on 31.03.2020	
1	Construction of 47 Roads (ICBR-II)	25 ICBRI-I roads	-	5974.8	19898	08 years from date of commencement	0	0%	0	0%	CCS note for c/o 32 ICBR-II amounting to Rs. 12419.40 Cr forwarded to Cabinet Secretariat.
2	Construction of Marsimik la-Hot Spring Road	32.9 KMs	HLEC	120.58	153.08	Mar-20	44.09	29%	6.40 Km	20%	Limited Working season. Construction of bailey bridges on road approved in Dec 2019.
3	Construction/Upgradation of Helipads		HLEC	75.79	208.41	Mar-20	12	10%	-	37%	Less response/participation in tenders.

												Delay in Trial Landing. Land issues.
4	Development of critical infrastructure in Arunachal Pradesh		-	600	1175.54	5 years from date of commencement	0	0%	-			For appraisal of project, EFC note send to DOE for convening EFC meeting.
5	Construction of Integrated building for 96 ITBPs BOP		-	1923.62	5280	Mar-22	0	0%	-			DPR under preparation.
6	Project for Solar Power Plant at 23 BOPs for ITBP		CCS	3.64	3.64	Mar-19	0.53	15%	-	7%		Sanctioned during March 2019. Delay in finalization of tenders due to less response. Problems in transportation of material in extremely difficult terrain.

7	Infrastructure development in BOPs staging camps, shellers etc. including land acquisition.		CCS	704.44	-	Mar-23	12.86	2%	-	1%	Shortage of availability of resources/firms. Limited Working Season and Extremely Difficult Terrain. No road connectivity at most of the BOPs
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Observations:

The Table 3.6 depicts the Physical and Financial status of new projects currently under progress or in process of taken up on the Indo-China Border, status, and their reasons of delay. As the data suggests, there has been no completion for either of the project. All the projects are currently under progress.

The reasons of delay or non-completions as highlighted in the table are:

1. Shortage of availability of resources/firms.
2. Limited Working season.
3. Land issues in border areas yet to be resolved/finalized.
4. Low response/participation in tenders.
5. Delay in finalization of DPR by agencies.
6. Problems in transportation of material in extremely difficult terrain.
7. No road connectivity at most of the BOPs.

2. INDO-PAKISTAN BORDER WORKS

Table 3.7 Indo-Pakistan Border Works- Fund Allocation (Ongoing Projects)

Indo-Pakistan Border Works- Fund Allocation (Ongoing Projects)													
S. No.	Name of Project	Approved Cost	Anticipated Approved Revised Cost	Expenditure as on 31.03.17	Allocation Year Wise (Rs.in Crore)				Spill over beyond 2019-20	Status/ PDC	Cost Overrun (Current) (Cr.)	Funding Requirement that may arise after March 2020	Whether project is to be taken up/ dropped
					2017-18	2018-19	2019-20	Total (2017-20)					
1	Composite Scheme of Gujarat for Floodlights, Roads, Fencing and Link Road BOPs (340 Kms) (Ongoing)	1201	1425.22	1031.08	23.6	230.65	105	359.25	0	Mar-20	0	0	-
2	Construction of Earthen Bund naka cum machan cum fighting bunkers along existing	341	341	37.315	8.62	41.76	46	96.38	207.305	Mar-23	0	207.305	Taken Up

	fencing at International Border in Jammu sector from BP No. 01 to 106, BP No. 542 to 566 & BP No. 848 to 881												
3	Construction of Border Security Fencing in original washed away and Riverine gaps along Indo-Pak Border in Jammu Sector SH: PaharpurFwd (BP-1) to Chillyari (BP-182) and Maluchak (BP	29.9	29.9	25.13	1.92	1	1.75	4.67	0	Completed	0	0	Completed

	12/6 to BP-50), OP Chennab (BP-514) to Pital (BP-1081) & SP-II (BP-80) to Nursery (BP-51) (9.80 km)												
4	Construction of Bridges/ Culverts over rivers/Nallahs along Indo-Pak Border in Jammu Sector over PhagNallah, ShapNallah/ Tama River, BabanNallah and BeinNallah	31.12	31.12	0	0.6	2	1	3.6	27.52	Mar-20	0	27.52	Taken Up

5	Construction of Bridges/Culvert s over rivers/Nallahs along Indo-Pak Border in Jammu Sector over DhamlaNallah, BeliNallah, AIK Nallah and Simbol Lake	18.81	18.81	0	0.1	0	0	0.1	18.71	Mar-20	0	18.71	Taken Up
6	Shifting of Border Security Fencing in Punjab including laying of CC pavement etc. between BP No. 2/M to 52/M close to I.B. in Gurdaspur of Punjab along	35.71	35.71	20.54	0	5	0	5	0	Completed	0	0	Completed

	Indo-Pak Border												
7	Construction of Border security fencing in Punjab Sector. SH: - Providing cement concrete pavement under existing fencing including replacement of barbed wire and concertina coil between BP No. 01/M to 256/05 at different location/stretche s (phase-III) 140.615	82.36	82.36	40	37.36	5	0	42.36	0	Completed	0	0	Completed

8	Construction of Pontoon Bridge (150 m) on Sutlej river near BOP Gajniwala Ferozpur sector (Punjab)	3.62	3.62	0.97	0	0.42	0	0.42	0	Completed	0	0	Completed
9	Strengthening of damaged fencing and providing CC pavement between BP No. 274 to 304/M and BP No. 361 to 391/M in Ganganagar District in Rajasthan (Length 83.10 Km)	49.91	58.43	39.13	0	0	0	0	19.3	Mar-21	8.52	19.3	Taken Up
10	Upgrading, Strengthening and providing relief	5.37	5.37	3.33	2.04	0	0	2.04	0	Completed	0	0	Completed

	culvert to link road from Dharamshala to Vigokote between RD 0.00 to 60.0 km												
11	Execution of fencing works damaged due to recent floods in Jammu Sector along Indo-Pak border under Jammu Ftr 15.72 kms	17.48	17.48	14.59	0.4	0.4	0.078	0.878	0	Completed	0	0	Completed

12	Consultancy Services for Topographical Geo-physical and Field Survey, Geological studies and geo-technical investigations for Planning and Designing for foundations of poles, route of cable lying etc. for Providing Border Flood Lighting in 32.326 Km stretch from BP No. 701/3-S to 740/M in Jaisalmer Sector in	0.4196	0.4196	0.08	0.11	0.04	0	0.15	0	Completed	0	0	Completed
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	shifting Sand Dunes Area.												
13	Replacement of Border Flood Lighting Infrastructure along Indo-Pak border under the BOPs of Shri Ganga Nagar, Bikaner, Jaisalmer (N&S) and Barmer under Jodhpur and Gandhinagar Frontier in	45.03	45.03	7.43	14.8	2.7	1.1	18.6	0	Completed	0	0	Completed

	Rajasthan Sector. (Phase I of 111.5 kms) Package No. 1 (Sriganganagar sector)												
14	Special repair of BFL along Indo-Pak border in A) Tharad under Gujarat sector for BOP No. 938, 941, 944, 994, 998, 1001, 1003, 1006 (approx. 39 KMs) B) Bhuj under Gujarat Sector for BOP No. 1051, 1054, 1057, 1100,	14.15	14.15	9.36	0	0	0	0	0	Completed	0	0	Completed

	1103, 1106, 1109, 1111, 1115, 1120, 1123 (approx. 55 KMs)												
15	High Mast flood lighting in the AOR Punjab Frontier (SH: Providing 77 Nos. High Mast Lights)	12.15	12.15	0	8	2.6	0.23	10.83	0	Completed	0	0	Completed
16	Border Flood Lighting with LED fittings (along the shifted Border Fencing in 07 stretches) 20.88 KM length from BP	12.99	12.99	4.28	0.25	2	0	2.25	0	Completed	0	0	Completed

	No. 2/M to 52/M in Gurdaspur Sector of Punjab												
17	High Mast Lighting in AOR of 137 BN BSF, BOP Old Gazniwala, New Gazniwala and Rajomohattam of Ferozepur Sector of Punjab	3.61	3.61	3.09	0	0	0	0	0	Completed	0	0	Completed
18	Construction of Border Security Fencing in Original, Washed away and riverine gaps along Indo- Pak Border in Jammu Sector	11.6	11.6	8.09	0.84	0.5	0.3	1.64	1.87	Mar-20	0	1.87	Taken Up

19	Construction of Gadhauli-Santhalpur road measuring 255 KMs in Gujarat	550	208	208	0	0	0	0	0	Dropped	0	0	Dropped
20	Maintenance of IPB work (from 2017-18 to 2019-20)	406	406	0	111.7 2	110.6	93.64	315.96	0	Mar-20	0	150	Taken Up
	Total	2872.23	2762.97	1452.42	210.3 6	404.67	249.1	864.12 8	446.42 7		8.52	424.71	

Observations:

The Table 3.7 represents all the details of the Ongoing projects on the Indo-Pakistan Border, their year-wise fund allocation and utilization- distribution and cost-overrun. As depicted in the table, there has been cost-overrun for one of the project nos. 8 while project no. 19 has been dropped Twelve of all the projects have reached completed while other projects are currently under progress.

Table 3.8 Indo-Pakistan Border Works- Fund Allocation (New Projects)

Indo-Pakistan Border Works- Fund Allocation (New Projects)										
S.No.	Name of the Project	Approved Revised/ New Project Cost	Allocation (Year- wise) (Rs. In Crores)				Status/ PDC	Cost Overrun (Current) (Cr.)	Funding Requirements that may arise after March 2020	Whether project is to be taken up/ dropped
			2017-18	2018-19	2019-20	Total (2017-20)				
1	Induction of Hi-Tech Surveillance along Indo-Pakistan border	1673	0	0	0	0	Mar-23	0	1673	Taken Up
2	Construction of lateral and axial roads along Indo-Pakistan border in State of Punjab and Rajasthan	2990.87	0	0	0	0	Mar-25	0	2990.87	Taken Up
3	Replacement of Border Flood Lighting Infrastructure along Indo-Pakistan Border	302.99	0	8.49	36.15	44.64	Mar-22	0	258.35	Taken Up
4	Providing Border Flood Lighting in 32.326 Kms stretch from BP no 701/3-S to 740/M in Jaisalmer Sector in shifting Sand Dunes Area	50	0	0	0	0	Mar-20	0	50	Taken Up
5	Replacement of Border Flood Lighting Infrastructure along Indo-Pakistan Border under Punjab Frontier from BOPs Chandigarh to Nejeke (179 BOPs)	150	0	0	0	0	Mar-20	0	0	Dropped
	Total	5166.86	0	8.49	36.15	44.64		0	4972.22	

Observations:

The Table 3.8 represents the Fund details of new projects currently in progress or in process of being taken-up on the Indo-Pakistan Border, their year-wise fund allocation and utilization distribution. As the data suggests, one of the projects (No. 5) has been dropped.

Table 3.9 Indo-Pakistan Border Works- Physical and Financial Status (Ongoing Projects)

Indo-Pakistan Border Works- Physical and Financial Status (Ongoing Projects)											
S.No.	Name of the Project	KMs/Number sanctioned	Approved by	Approved cost (Rs. In Crore)	Revised cost, if any (Rs. In Crore)	PDC/ Revised PDC/ Updated PDC	Financial progress		Physical progress		Reasons for delay if any
							Expenditure till 31.03.20 (Rs. In crore)	% Expenditure	Physical progress in No./ Km	% physical progress as on 31.03.2020	
1	Composite Scheme of Gujarat for Floodlights, Roads, Fencing and Link Road BOPs (340 Kms) (Ongoing)	340 km	CCS	1201	1425.22	Mar-20	1408	98.79%	330	95%	Timeline has been extended by GOI due to prevailing COVID-19 situation.

2	Construction of Earthen Bund naka cum machan cum fighting bunkers along existing fencing at International Border in Jammu sector from BP No. 01 to 106, BP No. 542 to 566 & BP No. 848 to 881.	179 km	CCS	341	341	Mar-23	133.685	39.20%	4	10%	Work is in progress in 33.10 Kms pilot project for construction of earthen bundh project.
3	Construction of Border Security Fencing in original washed away and Riverine gaps along Indo-Pak Border in Jammu Sector. SH: PaharpurFwd (BP-1) to	9.80 km	HLEC	29.9	29.9	Mar-20	29.5	98.66%	9.5	96%	Due to non-conductive situation at international Border in Jammu sector along IPB, the work could not be completed in specified

	Chillyari (BP 12/6 to BP 50), OP Chennab (BP-514) to Pital (BP-1081) & SP-II (BP-80) to Nursery (BP-51) (9.80 km)										time. Further, time line has been extended by GOI due to COVID-19 situation.
4	Construction of Bridges/ Culverts over rivers/nallahs along Indo-Pak Border in Jammu Sector over PhagNallah, ShapNallah/Tarna River, BabanNallah and BeinNallah	2.24 km	HLEC	31.12	31.12	Mar-20	3.6	11.57%	0.5	10%	Due to non-conductive situation at international Border in Jammu sector along IPB, the work could not be completed in specified time. Further, timeline has been extended by GOI due to

											COVID-19 situation.
5	Construction of Bridges/Culverts over rivers/Nallahs along Indo-Pak Border in Jammu Sector over DhamlaNallah, BeliNallah, AIK Nallah and Simbol Lake		HLEC	18.81	18.81	Mar-20	0.14	0.74%		5%	Due to non-conductive situation at international Border in Jammu sector along IPB, the work could not be completed in specified time. Further, timeline has been extended by GOI due to COVID-19 situation.

6	Shifting of border security fencing in Punjab including laying of CC pavement etc. between BP Nos. 2/M to 52/M close to I.B. in Gurdaspur of Punjab along Indo-Pak Border	30 km	HLEC	35.71	35.71	Completed	20.54	57.52%	30	100%	Completed
7	Construction of Border security fencing in Punjab Sector SH: Providing cement concrete pavement under existing fencing including replacement of barbed wire and concertina coil between BP No. 01/M to 256/05	140.615 km	HLEC	82.36	82.36	Completed	82.36	100%	140.615	100%	Completed

	at different location/stretches (phase-III) 140.615										
8	Construction of Pontoon Bridge (150m) on Sutlej river near BOP Gajniwala Ferozpur Sector (Punjab)	150 Mtrs	HLEC	3.62	3.62	Completed	0.97	26.80%	150	100%	Completed
9	Strengthening of damaged fencing and providing CC pavement between BP No. 274 to 304/M and BP No. 361 to 391/M in Ganganagar District in Rajasthan	83.10 km	HLEC	49.91	49.91	Mar-21	39.12	78.38%	75.1	91%	Work is in progress

	(Length 83.10 Km)											
10	Upgrading, Strengthening, and providing relief culvert to link road from Dharamshala to Vigokote between RD 0.00 to 60.0 km	60 km	HLEC	5.37	5.37	Completed	5.37	100%	60	100%	Completed	
11	Execution of Fencing works damaged due to recent floods in Jammu Sector along Indo-Pak border under Jammu Ftr 15.72 kms	15.72 km	HLEC	17.48	17.48	Completed	14.99	85.76%	15.72	100%	Completed	

12	Consultancy Services for Topographical, Geo-physical and Field Survey, Geological studies and geo-technical investigations for Planning and Designing for foundations of poles, route of cable lying etc. for Providing Border Flood Lighting in 32.326 KM stretch from BP No. 701/3-S to 740/M in Jaisalmer Sector in shifting Sand Dunes Area	Consultancy study	HLEC	0.4196	0.4196	Completed	0.1942	46.28%	Study Complete	100%	Completed
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13	Replacement of Border Flood Lighting Infrastructure along Indo-Pak border under the BOPs of Shri Ganga Nagar, Bikaner, Jaisalmer (N&S) and Barmer under Jodhpur and Gandhinagar Frontier in Rajasthan Sector (Phase I of 111.5 kms) Package No. 1 (Sriganganagar sector)	111.50 km	HLEC	45.03	45.03	Completed	26.32	58.45%	111.5	100%	Completed
14	Special repair of BFL along Indo-Pak border in		HLEC	14.15	14.15	Completed	9.36	66.15%		100%	Completed

	A) Tharad under Gujarat sector for BOP No. 938, 941, 944, 994, 998, 1001, 1003, 1006 (Approx.39 kms)	39 km							39		
	B) Bhuj under Gujarat Sector for BOP No. 1051, 1054, 1057, 1100, 1103, 1106, 1109, 1111, 1115, 1120, 1123 (approx. 55 kms)	55 km							55		
15	High Mast flood lighting in the AOR Punjab Frontier (SH: Providing 77 Nos. High Mast Lights)	77 Nos	HLEC	12.15	12.15	Completed	10.82	89.05%	77	100%	Completed
16	Border Flood Lighting with LED fittings (along the	20.88 km	HLEC	12.99	12.99	Completed	6.53	50.27%	20.88	100%	Completed

	shifted Border Fencing in 07 stretches) 20.88 km length from BP No. 2/M to 52/M in Gurdaspur Sector of Punjab										
17	High Mast Lighting in AOR of 137 BN BSF, BOP Old Gazniwala, New Gazniwala and Rajomohattam of Ferozpur Sector of Punjab	3 BOPs	HLEC	3.61	3.61	Completed	3.09	85.60%	3	100%	Completed
18	Construction of Border Security Fencing in Original, washed away and riverine gaps along Indo-Pak Border in Jammu Sector	34 BOPs	HLEC	11.6	11.6	Mar-20	9.93	85.60%	29	85%	Due to non-conductive situation at international Border in Jammu sector along IPB, the work could

	(providing BFL with HIGH mast light in left over gaps)										not be completed in specified time. Further, timeline has been extended by GOI due to COVID-19 situation.
19	Construction of Gadhauli-Santhalpur road measuring 255 KMs in Gujarat	255 km	CCS	550	208	Dropped	208	100%	176	70%	This project was approved by CCS at an estimated cost of Rs. 550 Cr for construction of 255 KMs road in state of Gujarat. Work in 176 KMs was completed at an est. cost

											of Rs. 208 Cr and rest 79 Kms stretch of this project was dropped and later taken up by MoRTH as part of National Highways.
20	Maintenance of IPB work (from 2017-18 to 2019-20)	It is a continuous process.	HLEC	406	406	Mar-20	327.01	80.54%	It is a continuous process	100%	Completed

Observations:

The Table 3.9 represents the Physical and Financial status (in value and percentage) of ongoing projects on the Indo-Pakistan Border, their Approval authorities, status, and the reasons of delay. As depicted in the table, twelve of the projects have reached their completion. While two of the projects are nearing completion, the work being delayed due to Covid-19 Crisis. One of the projects (No. 19) has been dropped as the work was taken up by MoRTH as part of National Highways.

The major reasons of delay as highlighted by the table are:

- Timeline extension by GOI due to prevailing COVID-19 situation.
- Due to non-conducive situation at international Border in Jammu sector along IPB, the work could not be completed in specified time.

Table 3.10 Indo-Pakistan Border Works- Physical and Financial Status (New Projects)

Indo-Pakistan Border Works- Physical and Financial Status (New Projects)											
S.No.	Name of the Project	km/ Number sanctioned	Approved by	Approved/ Apprised cost (Rs. In Crore)	Revised cost, if any (Rs. In Crore)	PDC/ Revised PDC/ Updated PDC	Financial progress		Physical progress		Reasons for delay if any
							Expenditure till 31.03.20 (Rs. In crore)	% Expenditure	Physical progress in No./ Km	% physical progress as on 31.03.2020	
1	Induction of Hi-Tech Surveillance along Indo-Pakistan border	-	-	1673	-	Mar-23	-	-	-	-	Work not yet approved
2	Construction of lateral and axial roads along Indo-Pakistan border in State of Punjab and Rajasthan	-	-	2990.87	-	Mar-25	-	-	-	-	Work not yet approved
3	Replacement of Border Flood Lighting Infrastructure along Indo-Pakistan Border	554 km	HLEC	302.99	302.99	Mar-22	44.42	-	100 km	20%	Work is in progress
4	Providing Border Flood Lighting in 32.326 Kms stretch from BP no. 701/3-S to 740/M in Jaisalmer Sector in	32.326 km	HLEC	50	32.14	Mar-20	0	0	0	0	Work recently sanctioned and is not yet started

	shifting Sand Dunes Area										
5	Replacement of Border Flood Lighting Infrastructure along Indo-Pakistan Border under Punjab Frontier from BOPs Chandigarh to Nejeke (179 BOPs)	-	-	150	-	Dropped	-	-	-	-	Overlapping of projects

Observations:

The Table 3.10 represents the Physical and Financial status (in value and range) of new projects currently in progress or in process of being taken-up on the Indo-Pakistan Border, their year-wise fund allocation and utilization, status, and reasons of delay As the data suggests, one of the projects, no.5 has been dropped due to overlapping with another project. Work has been recently sanctioned on all projects therefore all projects are currently under progress.

3. INDO-BANGLADESH BORDER WORKS

Table 3.11 Indo-Bangladesh Border Works- Fund Allocation (Ongoing Projects)

Indo-Bangladesh Border Works- Fund Allocation (Ongoing Projects)													
S.No.	Name of Project	Approved Cost	Anticipated / Approved Revised Cost	Expenditure as on 31.03.17	Allocation year wise (Rs.in Crore)			Total (2017-20)	Spill over beyond 2019-20	Status/ PDC	Cost Overrun (Current) (Cr.)	Funding Requirements that may arise after March 2020	Whether project is to be taken up/ dropped
					2017-18	2018-19	2019-20						
1	CCS Construction of barbed wire and fencing & Construction of road	4405.43	5459.52	4026.527	199.95	408.08	344	952.03					
					29.78	23.15	12.96	64.89	416.073	Dec-20	0	416.073	Under Progress
2	CCS Construction of OP Tower etc.	1327.77	1604.07	1289.07	86.27	67.31	25.41	178.99	136.01	Jun-20	0	136.01	Under Progress

3	CCS Construction of BOP	2494.76	2584.85	1334.85	505.33	347.69	150	1003.0 2	246.98	Mar-20	0	1003	Under Progress
4	CCS Construction infrastructure BOP elements BSF	472.81	516.81	281.74	51.05	50	22.05	123.1	111.97	Mar-21	0	111.97	Under Progress
	Standalone												
5	Construction of Road from BOP Simna to BOP Harinakhola in Tripura	36.87	36.87	34.65	2.2	0	0	2.2	0	Completed	0	0	*Except for approx. 600 mtrs. Where work is held up due to public protest, rest of the work is completed.
6	Extra ordinary repair of IBB road in West Bengal, Assam, Meghalaya,	68.76	68.76	48.45	17	3.31	0	20.31	0	Completed	0	0	Completed

	Mizoram & Tripura												
7	Extra ordinary repair of IBB road i/c repair of WBM & Premix Carpeting in North Tripura	11.5	11.5	0	2	3.5	3	8.5	3	Mar-20	0	3	Under Progress
8	Providing CCV Cameras for more than 24 mtrs. Span bridge gap along IBB Dhubri Sector Assam	2.02	2.02	0	2	0.02	0	2.02	0	Completed	0	0	Completed
9	Construction of RCC Helipads along IBB & IPB and construction of Advance FRPs (Fiber Reinforced Plastic)	89.46	89.46	14.67	5.91	40	28.88	74.79	0	Mar-20	0	0	Completed

10	Supply, installation, commissioning of 25 kwp Solar PV power plant 472 no. of BOPs	52.33	52.33	0	9.68	42.65	0	52.33	0	Mar-20	0	0	Completed
11	Providing water supply to 181 BOPs, BSF.	99.91	99.91	0	95.99	3.92	0	99.91	0	Mar-20	0	0	Completed
	TOTAL	9061.62	10526.1	7029.957	1006.16	989.63	586.3	2582.09	914.053		0	1670.05	

Observations:

The Table 3.11 represents the Fund details of ongoing projects on the Indo-Bangladesh Border, their year-wise fund allocation and utilization- distribution and cost-overrun. As depicted in the table, there has been no cost-overrun for any of the project. Five of all the projects have reached completion while other projects are currently under progress.

Table 3.12 Indo-Bangladesh Border Works- Fund Allocation (New Projects)

Indo-Bangladesh Border Works- Fund Allocation (New Projects)											
S.No.	Name of the Project	Approved Revised/ New Project Cost	Allocation (Year- wise) (Rs. In Crores)				Total (2017-20)	Status/ PDC	Cost Overrun (Current) (Cr.)	Funding Requirements that may arise after March 2020	Whether project is to be taken up/ dropped
			2017-18	2018-19	2019-20						
1	Technology Solution-Dhubri, Assam	86.83	6.77	43.01	19.05	68.83	Mar-19	0	18	Taken Up	
2	Renovation and upgradation of BOP building out-lived more than 20 years life span in BSF	134.07	0	3	38.9	41.9	Mar-22	0	92.17	Under Progress	
3	Construction of balance elements of 135 BOPs where land is more than 3 acres at non-composite BOPs	421.77	0	5.67	142.3	147.97	Mar-22	0	273.8	Taken Up	
4	Technological Solution-Tripura & West Bengal	64	0	0	0	0	Mar-21	0	64	Taken Up	
5	Maintenance (for 2017-18 to 2019-20)	416	115.5	106.37	93.65	315.52	Mar-20	0	150	Taken Up	
	Total	1122.67	122.27	158.05	293.9	574.22		0	597.97		

Observations:

The Table 3.12 represents the Fund details of new projects on the Indo-Bangladesh Border, their year-wise fund allocation and utilization- distribution and cost-overrun. As depicted in the table, there has been no cost over-run and all the projects are under progress.

Table 3.13 Indo-Bangladesh Border Work-Physical and Financial Status (Ongoing Projects)

Indo-Bangladesh Border Work-Physical and Financial Status (Ongoing Projects)											
S. No.	Name of Project	Km/Number Sanctioned	Approved by	Approved Cost (Rs.in Crore)	Revised Cost if any (Rs.in Crore)	PDC/ Revised PDC/ PDC Updated	Financial Progress		Physical Progress		Reason for Delay if any
							Expenditure till 31.03.20 (Rs.in Crore)	% Expenditure	Physical Progress in Km	% of Physical Progress as on 31.03.20	
1	Construction of barbed wire fencing and construction of road	Fence-2468 km & Road-1512 km	CCS	4405.43	5459.52	Dec-20	4877.627	89.34%	Fence-1972 km & Road-1017 km	Fence-80% & Road-68%	
2	Construction of OP Tower etc.	2969.90 km	CCS	1327.77	1604.07	Jun-20	1301.88	81.60%	2672.91	90%	

3	Construction of Border Out Posts (BOP)	422 BOPs	CCS	2494.76	2584.85	Mar-20	2358.596	91.18%	322	77%	
4	Construction infrastructure BOP elements, BSF	Old BOPs	CCS	472.81	516.81	Mar-21	404.84	78.33%	Old BOPs upgradation	85%	
	Standalone										
5	Construction of Road from BOP Simna to BOP Harinakhola in Tripura	25.05	HLEC	36.87	44.49	Mar-19	41.87	94.11%	24.5	99%	Approx. 600 mtrs stretch is left due to non-availability of site. Remaining work is completed.
6	Extraordinary repair of IBB road in WB, Assam, Meghalaya, Mizoram & Tripura	in patches	HLEC	68.76	68.76	Completed	65.57	95.36%	In Patches	100%	

7	Extraordinary repair of IBB road and i/c repair of WBM & Premix Carpeting in North Tripura	in patches	HLEC	11.5	11.5	Mar-20	8.5	73.91%	In Patches	70%	Timeline has been extended by Govt. of India due to prevailing COVID-19 situation.
8	Providing CCTV Cameras for more than 24 mtrs Span bridge gap along IBB Dhubri Sector Assam	180 Nos	HLEC	2.02	2.02	Completed	2	99.01%	180	100%	
9	Construction of RCC Helipads along IBB & IPB and construction of Advance FRPs (Fiber Reinforced Plastic)	17 Nos	HLEC	89.46	89.46	Completed	88.74	99.20%	17	100%	
10	Supply, installation, commissioning of	472 BOPs	HLEC	52.33	52.33	Completed	50.27	96.06%	472	100%	

	25 kwp Solar PV power plant 472 no of BOPs										
11	Providing water supply to 181 BOPs, BSF	181 BOPs	HLEC	99.91	99.91	Completed	97.21	97.30%	181	100%	

Observations:

The Table 3.13 depicts the Physical and Financial status (in value and percentage) of ongoing projects on the Indo-Bangladesh Border, their Approval authorities, status, and the reasons of delay. As depicted in the table, five of the projects have reached their completion. While two of the projects are at the verge of completion.

The major reasons of delay as highlighted above are as follow:

- Work is held up due to public protest, rest of the work is completed.
- Timeline has been extended by Govt. of India due to prevailing COVID-19 situation.

Table 3.14 Indo-Bangladesh Border Works – Physical and Financial Status (New Projects)

Indo-Bangladesh Border Works – Physical and Financial Status (New Projects)											
S.No.	Name of Project	Km/Number Sanctioned	Approved by	Approved Cost (Rs.in Crore)	Revised Cost if any (Rs.in Crore)	PDC/ Revised PDC/ PDC Updated	Financial Progress		Physical Progress		Reasons for Delay if any
							Expenditure till 31.03.20 (Rs.in Crore)	% Expenditure	Physical Progress in Km	% of Physical Progress as on 31.03.20	
1	Technology Solution-Dhubri, Assam	61 km	HLEC	86.83	86.83	Jul-20	62.83	72.36%	49	80%	
2	Renovation and upgradation of BOP building out-lived more than 20 years life span in BSF	Old BOPs		134.07		Mar-22					Scheme yet to be appraised

3	Construction of balance elements of 135 BOPs where land is more than 3 acres at non-composite BOPs	135 BOPs	HLEC	421.77	421.77	Mar-22	91.93	21.80%	0	0%	Work recently sanctioned and codal formalities under process
4	Technological Solution- Tripura & West Bengal			64		Mar-21					Work not yet approved
5	Maintenance (for 2017-18 to 2019-20)	It is a continuous process	HLEC	416	416	Mar-20	323.84	77.85%	It is a continuous process	100%	

Observations: The Table 3.14 depicts the Physical and Financial status (in value and range) of new projects currently in progress or in process of being taken-up on the Indo-Bangladesh Border, their year-wise fund allocation and utilization distribution, status, and reasons of delay. As the data suggests, one of the projects is nearing completion. Work on one of the projects (No. 3) is recently sanctioned and codal formalities under process.

4. INDO-NEPAL AND INDO-BHUTAN BORDER WORKS

Table 3.15 Indo-Nepal and Indo-Bhutan Border Works – Fund Allocation (Ongoing Projects)

Indo-Nepal and Indo-Bhutan Border Works – Fund Allocation (Ongoing Projects)													
				Allocation year wise (Rs.in Crore)									
S.No.	Name of Project	Approved Cost	Anticipated/ Approved Revised Cost	Expendi ture as on 31.03.17	2017- 18	2018- 19	2019- 20	Total (2017- 20)	Spill over beyond 2019-20	Status/ PDC	Cost Overrun (Current) (Cr.)	Funding Requirement that may arise after March 2020	Whether project is to be taken up/ dropped
1	Construction of border roads measuring 137 kms on Indo-Nepal border	3853	3853	1184.05	200.92	100	115	415.92	2253.03	Dec-22	No	2253.03	Under Progress
2	Construction of border roads measuring 313 kms on	1259	4600	9.88	0	1	1	2	4588.12	Mar-23	No	4588.12	Under Progress

	Indo-Bhutan border												
3	Development of infrastructure of SSB's BOPs	452.47	610.82	554.64	56.18	0	0	56.18	0	Completed	No	Nil	Completed
	TOTAL	5564.47	9063.82	1748.57	257.1	101	116	474.1	6841.15			6841.15	

Observations:

The Table 3.15 represents all the details of ongoing projects on the Indo-Nepal and Indo-Bhutan Borders, their year-wise fund allocation and utilization-distribution and cost-overrun. As depicted in the table, there has been no cost-overrun for any of the project. One of the projects has reached completion while other projects are currently under progress.

Table 3.16 Indo-Nepal and Indo-Bhutan Border Works- Fund Allocation (New Projects)

Indo-Nepal and Indo-Bhutan Border Works- Fund Allocation (New Projects)										
			Allocation (Year- wise) (Rs. In Crores)							
S.No.	Name of the Project	Approved Revised/ New Project Cost	2017-18	2018-19	2019-20	Total (2017-20)	Status/ PDC	Cost Overrun (Current) (Cr.)	Funding Requirements that may arise after March 2020	Whether project is to be taken up/ dropped
1	Development works for 130 BOPs of SSB	655.74	15.54	80	84.24	179.78	Mar-22		475.96	Under Progress
	TOTAL	655.74	15.54	80	84.24	179.78			475.96	

Observations:

The Table 3.16 represents the Fund details of new projects currently in progress or in process of being taken-up on the Indo-Nepal and Indo-Bhutan Borders, their year-wise fund allocation distribution and cost-overrun. As the data suggests, the project in under progress.

Table 3.17 Indo-Nepal and Indo-Bhutan Border Works - Physical and Financial Status (Ongoing and New Projects)

Indo-Nepal and Indo-Bhutan Border Works - Physical and Financial Status (Ongoing Projects)											
S.No.	Name of the Project	Km(s)/ Number(s) Sanctioned	Approved by	Approved cost (Rs. In Crore)	Revised cost (if any)	PDC/Revised PDC/Updated PDC	Financial Progress		Physical Progress		Reasons for delay/Remarks (if any)
							Expr. till 31.03.2020 (Rs. In Crore)	In % till 31.03.2020	In No./Kms	In % as on 31.03.2020	
Ongoing projects											
1	Indo-Nepal Border works	1377 km	CCS	3853	Nil	Dec 2020 for encumbrance free stretch i.e. 471.74 Km	1599.97	42%	Formation- 525.17	39%	Due to Litigation and Statutory clearance.
						Dec 2022 for stretches with encumbrances i.e. 828.06 Km			Surfacing- 298.72	22%	
2	SSB's Border Out Post		CCS	610.82	Nil	Mar-18	610.82	100%			
New Projects											
1	Development of infrastructure of SSB BOPs including land	130	CCS	655.74	Nil	Mar-20	179.27	27.33%		30%	Due to land acquisition issues and limited

	acquisition of BOPs										working season etc.
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Observations:

The Table 3.17 represents the Physical and Financial status (in value and range) of both ongoing and new projects currently in progress or in process of being taken-up on the Indo-Nepal and Indo-Bhutan Borders, their year-wise fund allocation distribution, status, and reasons of delay As the data suggests, all the projects are currently under progress.

The major reasons of delay as highlighted in the table are:

- Litigation and Statutory clearance.
- Land acquisition issues and limited working season etc.

5. INDO-MYANMAR BORDER WORKS

Table 3.18 Indo-Myanmar Border Works – Fund Allocation (Ongoing Projects)

Indo-Myanmar Border Works – Fund Allocation (Ongoing Projects)													
Allocation year wise (Rs.in Crore)													
S. No.	Name of Project	Approved Cost	Anticipated/ Approved Revised Cost	Expenditure as on 31.03.17	2017-18	2018-19	2019-20	Total (2017-20)	Spill over beyond 2019-20	Status/ PDC	Cost Overrun (Current) (Cr.)	Funding Requirements that may arise after March 2020	Whether project is to be taken up/ dropped
1	Infrastructure Development works of Company Operating Bases (COBs)	23.37	23.37	17.1	5	6.27	20	31.27	-	Mar-20	Nil	Rs. 20 Crore per year	Project to be taken up since maintenance/upgradation of COBs is a dynamic process.
	TOTAL	23.37	23.37	17.1	5	6.27	20	31.27					

Observations:

The Table 3.18 represents the Fund details of ongoing projects on the Indo-Myanmar Border, their year-wise fund allocation and utilization- distribution and cost-overrun. As depicted in the table, Project is to be taken up since maintenance/upgradation of COBs is a dynamic process.

Table 3.19 Indo-Myanmar Border Works – Fund Allocation (New Projects)

Indo-Myanmar Border Works – Fund Allocation (New Projects)										
S.No.	Name of the Project	Approved Revised/ New Project Cost	Allocation (Year-wise) (Rs. In Crores)				Status/ PDC	Cost Overrun (Current) (Cr.)	Funding Requirements that may arise after March 2020	Whether project is to be taken up/ dropped
			2017-18	2018-19	2019-20	Total (2017-20)				
1	Construction of Border Roads, Helipad, Heli base	15	0	0	0	0	Mar-20	Nil	Rs. 5 crore per year for pre-investment activities	Project to be taken up
	TOTAL	15	0	0	0	0				

Observations:

The Table 3.19 represents the Fund details of the New projects currently in progress or in process of being taken-up on the Indo-Myanmar Border, their year-wise fund allocation distribution, status and cost over-run. As the data suggests, the project is yet to be taken up.

Table 3.20 Indo-Myanmar Border Work-Physical Status

Indo-Myanmar Border Work-Physical Status											
S.No.	Name of Project	Km/Number Sanctioned	Approved by	Approved Cost (Rs.in Crore)	Revised Cost if any (Rs.in Crore)	PDC/ Revised PDC/ PDC Updated	Financial Progress		Physical Progress		Reasons For Delay if any
							Expenditure till 31.03.20 (Rs.in Crore)	% Expenditure	Physical Progress in No./Kms	% of Physical Progress as on 31.03.20	
1	Infrastructure Development of Company Operating Bases (COBs)/ Border Out Posts (BOPs) of Assam Rifles during the year 2018-19 and 2019-20	103 Works	HLEC	33.03		Dec-20	20	60.55%	57 Works	80%	Most of COBs of Assam Rifles are deployed in far-flung areas of North East where road connectivity is not available.

Observations: The Table 3.20 represents the physical and financial status (in value and percentage) of ongoing projects on the Indo-Myanmar Border, their Approval authorities, and the reasons of delay. Currently, work is delayed as most of COBs of Assam Rifles are deployed far-flung areas of North East where road connectivity is not available.

6. COASTAL SECURITY SCHEME (PHASE-II)

Table 3.21 Coastal Security Scheme (Phase- II)- Fund Allocation

Coastal Security Scheme (Phase- II)- Fund Allocation													
Allocation year wise (Rs.in Crore)													
S.No.	Name of Project	Approved Cost	Anticipated/ Approved Revised Cost	Expenditure as on 31.03.17	2017-18	2018-19	2019-20	Total (2017-20)	Spill over beyond 2019-20	Status/ PDC	Cost Overrun (Current) (Cr.)	Funding Requirements that may arise after March 2020	Whether project is to be taken up/ dropped
1	Coastal Security Scheme	1579.91	1579.91	129.02	16.31	341.02	666.22	1023.55		Mar-20			Completed

Observations:

The Table 3.21 represents the Fund allocation details of the current ongoing projects under Coastal Security Scheme Phase II, the year-wise fund allocation and utilization distribution and cost-overrun. As depicted in the table, there has been no cost-overrun for either of the project. The project has reached completion.

Table 3.22 Coastal Security Scheme (Phase-II)- Physical and Financial Status

Coastal Security Scheme (Phase-II)- Physical and Financial Status											
S. No.	Name of Project	Km/ Number Sanctioned	Approved by	Approved Cost (Rs.in Crore)	Revised Cost if any (Rs.in Crore)	PDC/ Revised PDC/ PDC Updated	Financial Progress		Physical Progress		Reasons for Delay if any
							Expenditure till 31.03.20 (Rs.in Crore)	% Expenditure	Physical Progress in No./Kms	% of Physical Progress as on 31.03.020	
1	CSS (Phase-II)	(#) As detailed below	Cabinet Committee on Security	1579.91	1580.56 (@)	Mar-20	133.36	8.44	(#)- As detailed below		Scheme completed on 31.03.2020
(#) - Physical components sanctioned under Phase-II of CSS											
S.No.	Particulars		Physical Components under Phase-II								
			Sanctioned	Completed/in Operation	%						
1	Coastal Police Stations		131	131	100%						
2	Jetties		60	38	63.33%						
3	Four Wheelers		131	131	100%						
4	Two Wheelers		242	242	100%						
5	Marine Police Operation Centers		10	10	100%						

(@) - An additional fund of Rs. 64.58 Lakh has been released to Govt. of Maharashtra for upgradation of 14 jetties of Maharashtra Maritime Board for utilization of Coastal Police, against the construction of the sanctioned 3 no. of jetties under the Scheme.

Observations: The Table 3.22 represents the Physical and Financial status (in value and percentage) of the project under CCS, the Approval authority, and the status. As depicted in the table, the project is under progress. The project status has been analyzed further in details in the following figure.

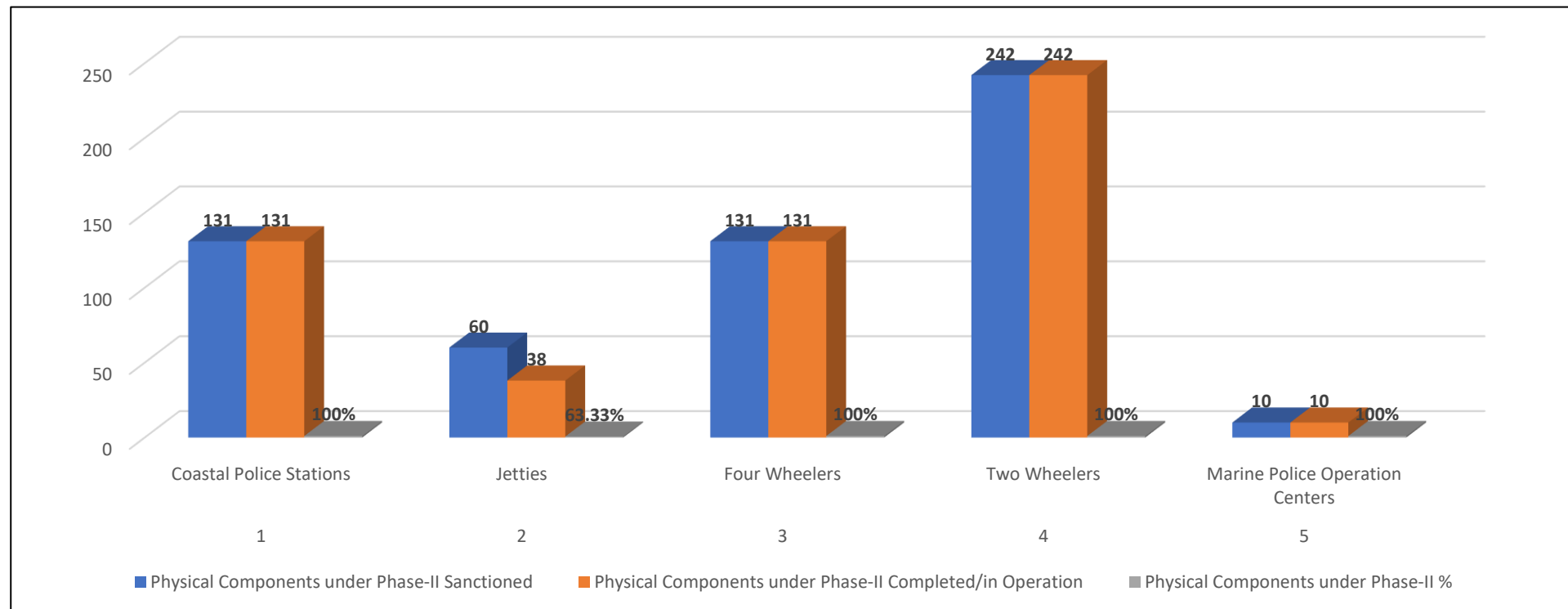


Figure 3.4 Status of Physical Components under CSS-Phase II

SCHEME ACHIEVEMENTS (DECEMBER 2017- MARCH 2020)

Table 3.23 BIM Scheme Achievements between December 2017 to March 2020

S.No.	Name of Work/Border	IPB	IBB	ICB	INB	IBhB	TOTAL
1	C/o of Border Roads (in kms)	45.26	101.255	121.15	140.82	-	408.485 km
2	C/o of BOPs in Nos	05	146	05	55	26	237 Nos
3	C/o of Fence in kms	32.26	212.909	-	-	-	245.169 km
4	C/o of Flood Lights in km	50.25	240.798	-	-	-	291.048 km

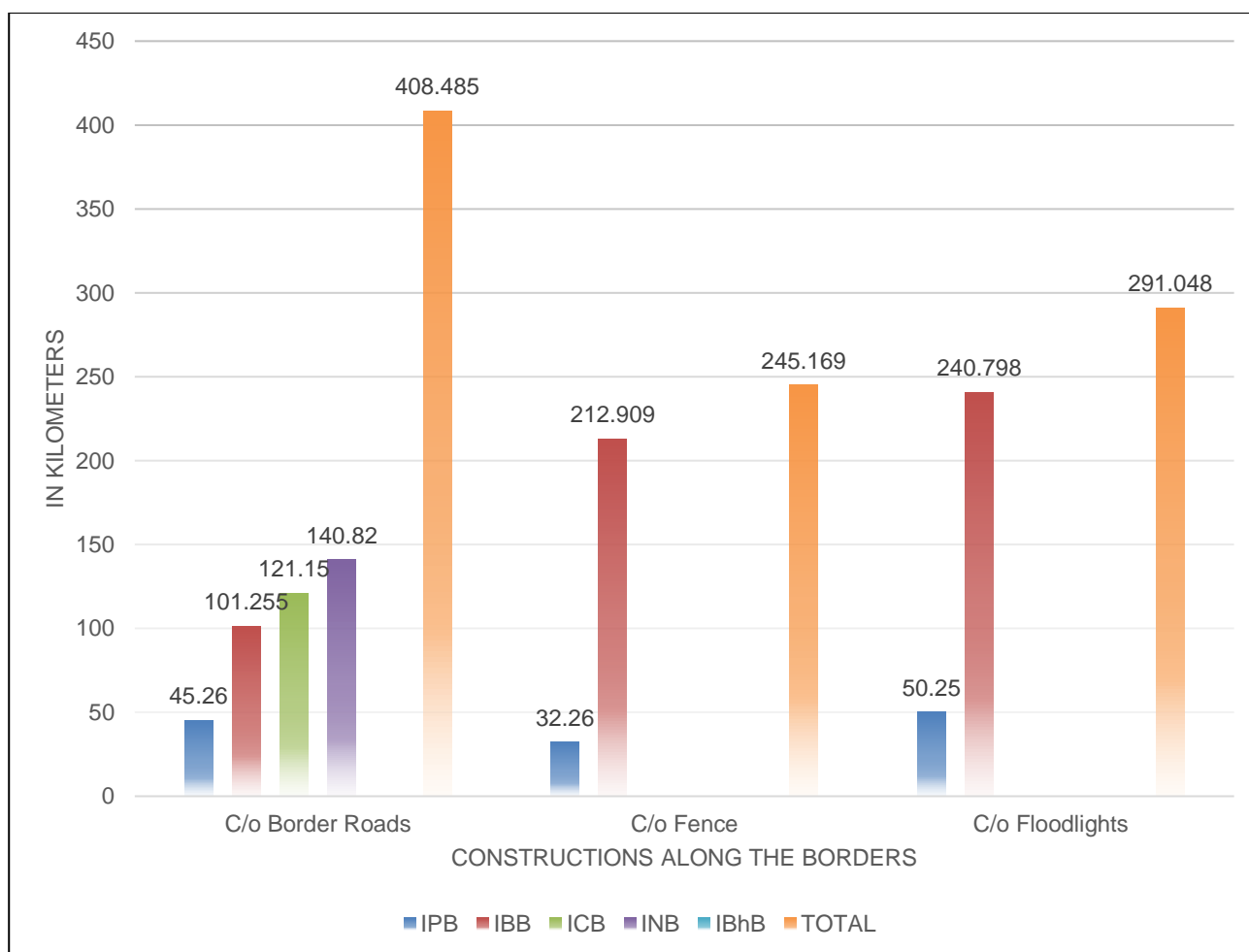


Figure 3.5 BIM Achievements- Infrastructure Status (Border Rods, Fence, & Floodlights)

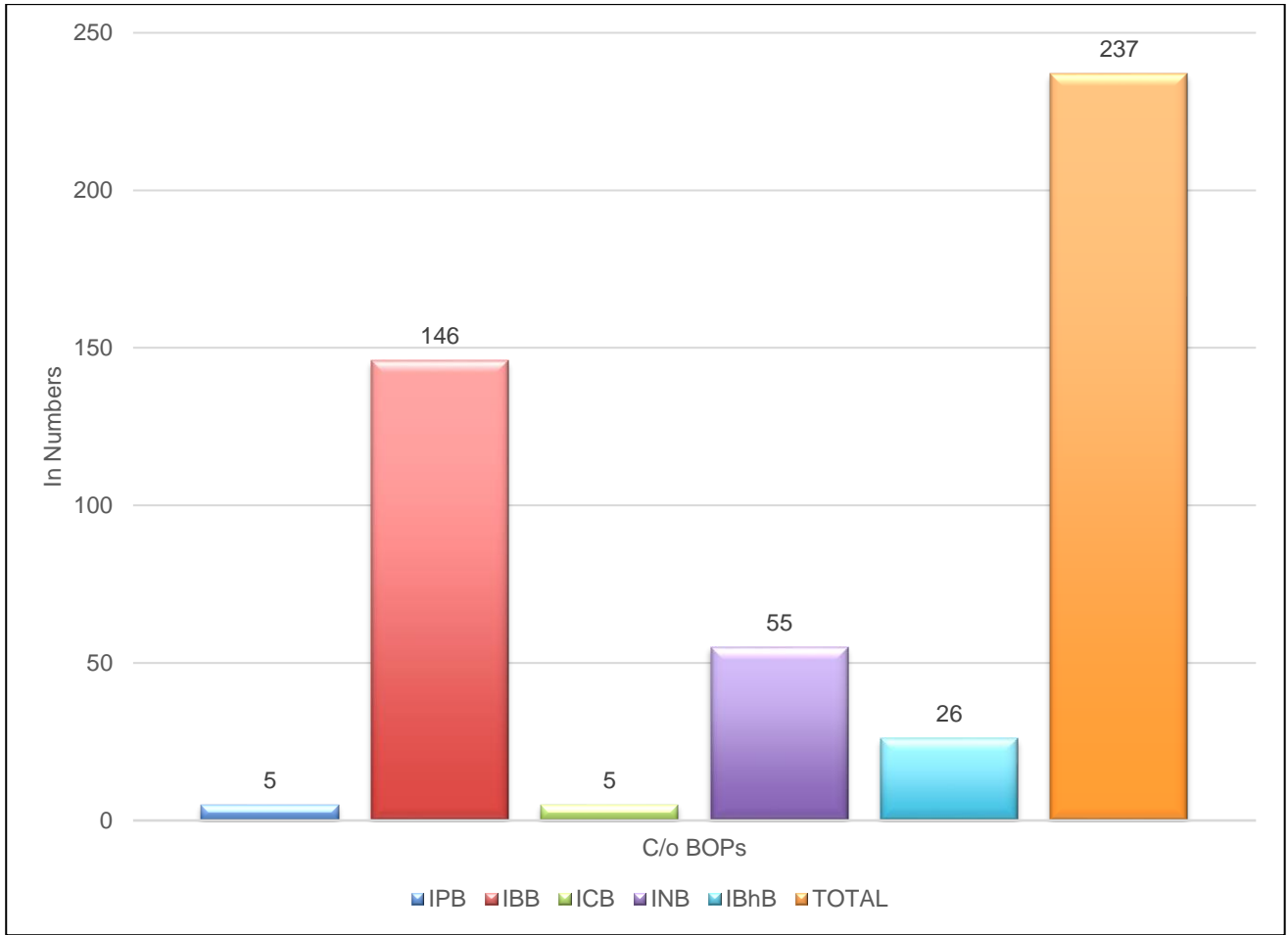


Figure 3.6 BIM Achievements – Infrastructure Status (BOPs)

Observations:

The Table 3.23 and Figures 3.5 and 3.6 represents the achievements of the BIM Scheme for the period 2017-2020. The data suggests that the scheme has been able to successfully construct and develop infrastructure on different borders. The major highlights of the achievement include the achievement of constructing Border Roads and Border Outposts along the borders.

However, the data also highlights a lack of infrastructure development of the Border Fencing and Floodlights. One important thing to be noted here is an absence of yearly targets and their timely status data.

3.3. BORDER-WISE ISSUES AND CHALLENGES

While India successfully positions itself as one of the core, influential nations of the world, its security scenario is becoming more vulnerable and complex. The roots of India's security challenges lie not only at the regional and international levels but also from within. These threats can be dealt with by securing the borders efficiently. However, the borders of India and their associated problems, geographical, social, and cultural, are vivid and varied. A list of different issues and challenges which characterises the different borders of India is shares below:

1. Indo-China Border

- Un-settled, un-demarcated and un-fenced border
- Large number of disputed pockets
- High Altitude Deployment ranging from 9000' to 19000'
- Poor Road Network
- Heavy snowfall, Glaciated region, Crevasses and Avalanches pose risk in movement.
- Lack of oxygen and extreme cold affects personnel, equipment, and vehicles.
- Prolonged rainy season, Landslides, Flash floods
- Dense Forest areas in NE region
- Exposure to High Altitude diseases

2. Indo-Pakistan Border

- Cross border firing & shelling in J&K.
- Cross border infiltration.
- Difficulties in erection of border infrastructure in Rann of Kutch and Sir Creek area.
- Kartarpur Saheb Corridor: Challenges for security forces to counter anti India activities likely to be carried out by hostile elements located in Pakistan.

3. Indo-Bangladesh Border

- Densely populated up to Zero line.
- Checking illegal migration.
- Cattle smuggling.
- Checking other smugglings (Arms, Narcotics, human, FICN).
- Shifting of villages located ahead of fence.
- Extended monsoon, limited working season.

- Tribal insurgencies in NE States.
- Difficult Riverine & Sundarbans areas to be covered with Technological Solutions (406.01 kms).

4. Indo-Nepal Border

- Smuggling of contrabands/prohibited items, human trafficking, FICN.

5. Indo-Bhutan Border

- Threat perception faced by Bhutan and India from Insurgent Groups (IGs)/underground activities in border areas.
- Needs close watch to prevent smuggling of liquor/drugs.

6. Indo-Myanmar Border

- Poor Infrastructure development along border.
- Insurgency.
- Location on the edge of “Drugs Golden Triangle” which facilitates smuggling, drug trafficking, FICN etc.
- Inter Tribe clashes, trans border close ethnicities (Nagas, Kukis, Chin, etc).

3.4. SUMMARY OF FINDINGS

During the evaluation study conducted by IIPA, the data was analysed under different aspects like Fund allocation and expenditure on yearly basis, Border-wise details of all projects, physical as well financial status, and reasons of delay in projects' completion between the years 2017-2020.

The study team observed and derived the following findings while analyzing the data pertaining to the BIM scheme:

1. Fund Allocation and Expenditure

- The final allocated budgetary amount differs from the projected amount. The final allocated amount was approx. half the projected amount.
- The highest allocation from the total outlay was done in the FY 2019-2020. While the lowest allocation was in FY 2018-2019.
- The highest allocation under the **Ongoing Projects** has been made for Indo-Bangladesh Border while Indo-Pakistan Border has been allocated the second highest amount.
- Due to Covid crisis, there has been an imposition of limit on funding this year. Such non-availability of funds or delays in sanctions may cause further cost and time-overrun.

2. Project Status and Completion

A quick study of all the fund and status details of the projects highlights that there has been no cost-overrun for most of the projects. However, some time-overrun has been noted in some of the projects owing to different geographical, climatic, or administrative issues.

The major reasons of delay as observed are:

- Shortage of availability of resources/ executing firms.
- Limited working seasons due to climatic and terrain conditions like flashfloods, avalanches, snowfall, incessant rains, etc.
- Land acquisition issues in the border areas due to remoteness which makes resolution of land issues in border areas a time-consuming process.
- Low response/participation in tenders.

- Hostile/firing incidents at Indo-Pak Border.
- Delay in finalization of DPR by the agencies.
- Delay in finalization of tenders due to low response.
- Problems in transportation of material in extremely difficult terrain.
- No road connectivity at most of the BOPs due to unfavorable terrains.
- Recent timeline extension by GOI due to prevailing COVID-19 situation.
- Due to non-conducive situation on international border in case of Jammu sector along IPB, due to which the work could not be completed in specified time.
- In some projects, work is held up due to public protest.

3. Scheme Achievements

- The BIM scheme has been able to successfully accomplish construction and upgradation work of border infrastructure on the borders. The major highlights of the achievements include increasing number of constructions of Border Roads and Border Out Posts along all borders.
- Furthermore, construction and installation of more Border Fence and Floodlights along the Indo-Pakistan and Indo-Bangladesh Borders have also been achieved.

4. Major Reasons of Delay

- It has been observed the major delay in completion of the project has been due to implementation of new Land Acquisition Act 2013 which resulted in delay in acquisition of land and in obtaining forests/wildlife clearances. The delay has been noted on part of the States in acquisition of land and in obtaining mandatory statutory forest and wildlife clearances which further slow-down the project work.
- Certain clearances are required under Coastal Regulation Zone (CRZ, 2011 Notification), Forest (Conversation) Act, 1980 and Wildlife Protection Act 1972 in case of activities in coastal areas, forest, and protected areas (National Park/ Sanctuary) respectively which are time-consuming.
- Delays are also caused due to public resistance in form of protests.

5. Other Issues and Challenges

- There has been time overrun in completion of some projects due to unforeseen circumstances and natural calamities, like unprecedented rains, consequential floods, and land sliding. The harsh climatic conditions pose a major challenge in managing the work force and completion of the project work on time.
- The cost of projects also increases considerably due to price escalation, increase in the scope of work, upgradation of specifications for roads, electrical works etc.
- Besides that, erratic power supply and adverse climatic and terrain conditions in the border areas also undermine the functioning of sophisticated surveillance system.

CHAPTER 4:
SUGGESTIONS AND RECOMMENDATIONS

4. SUGGESTIONS AND RECOMMENDATIONS

During the study of Third-party Evaluation of the BIM scheme, IIPA team made many important observations. In the process of evaluation, the IIPA team thoroughly studied the aspects of the scheme including its framework, implementation mechanism, achievements as well as its key issues and challenges. During the process of conversations with the officials of BM-I Division, different types of concerns, challenges and suggestions were placed. The study has incorporated all the concerns that were brought up along with the recommendation suggested by IIPA.

IIPA highly recommends continuation of the scheme as the scheme is a significant step in the direction of revolutionizing the border management system in the country. The conceptualization of the umbrella scheme has been an important step in collating all the diverse project works currently undergoing on different borders of the country under one roof. This has enabled government authorities to not only handle border management more efficiently but also go deeper into the challenges and bottleneck issues plaguing the border security.

To make the scheme more effective, the study team of IIPA has the following summary suggestion and recommendations for consideration of the competent authorities:

1. Prioritizing of ongoing projects and new projects keeping in view the availability of funds and country's security requirements. This will enable redirection of available resources and time towards fulfillment of urgent security concerns on borders.
2. Timely completion may be ensured by maximizing labour and machinery resources during the working season every year.
3. In case where there is revision of cost in projects, specific physical and financial milestones with corresponding half yearly targets may be incorporated in pursuance.
4. Keeping in view varying needs, priority-based requirements, operational issues, terrain conditions and other inevitable circumstances, execution of projects and incorporation of changes in their scope

as well as extension of time for completion within the overall financial ceiling may be timely processed.

5. State Governments may speed up land acquisition and aid in timely completion of projects.
6. It is noted that there is a cost overrun in most of the projects. MHA may put in place a Project Monitoring Unit (PMU) for these projects in addition to the existing high level monitoring committees. The project monitoring unit may review and solve delays and issues at a faster pace and on a more frequent basis.
7. The approval procedure for revised cost estimates should be initiated as soon as the revision becomes inevitable, rather than waiting for funds released to be fully spent.
8. To ensure the timely execution of projects adherence to the proposed timeline is important. Periodical reviewing of the projects may also help in fixing accountability of delays in execution of projects.
9. Efforts may be made to utilise the knowledge and skill set available with private sector in the context of deployment and management of advanced electronic surveillance system and maintenance of security related data.

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**Agenda Points for the Evaluation Study of Umbrella Scheme of
Border Infrastructure and Management (BIM)**

In reference to the third-party evaluation of the umbrella scheme of Border Infrastructure and Management (BIM), IIPA study team would like to access the official records and data pertaining to following

S. No.	Agenda Point
1.	Details of Scheme/Scheme guidelines <ul style="list-style-type: none"> - What is the scheme about? - Purpose, structure, design, objectives - Scheme guidelines
2.	Implementation mechanism <ul style="list-style-type: none"> - Work plan that was designed - Personnel engaged - Areas of implementation - at Central, State, Block and Village level
3.	Contribution of scheme in development of the border areas <ul style="list-style-type: none"> - Assets/ Service creation & Maintenance Plans
4.	Operational issues, Terrain conditions, Manpower Analysis <ul style="list-style-type: none"> - No. of manpower - Workload analysis of the sanctioned manpower - Issues faced during
5.	Fund and Budget Allocation <ul style="list-style-type: none"> - Details - Sub scheme / components component wise budget allocation - Rules regarding expenditure

6.	Actual expenditure <ul style="list-style-type: none"> - Details, logs, Expenditure sheets
8.	Details about stake holders/ Beneficiaries
9.	Scheme Achievements <ul style="list-style-type: none"> - Output/outcome analysis based on NITI Aayog parameters - No. of schools, roads, helipads, other infrastructure constructed - Communities/ people impacted
10.	Gaps in achievements of outcomes <ul style="list-style-type: none"> - The gaps between the output/outcome expectations - Lack of infrastructure build - Other issues
11.	Challenges faced during implementation <ul style="list-style-type: none"> - Budgetary sanctions - Administrative issues - Community/ public conflict and resistances - Other issues
12.	Input use Efficiency
13.	Vision for the future

Questionnaire for Border Infrastructure and Management (BIM)

Subheads/Questions

Employment Generated under BIM

1. Type: Formal/ Informal ...Permanent/Contractual... Non-civilian/civilians
2. No. of personnel employed
3. Different categories of staff under BIM
4. Competent Authority overlooking HR issues under BIM
5. Organization hierarchy and designations

Contribution of scheme

1. What are the Assets/ Services creation under BIM?
2. Types and other details of Assets/ Services

Operational issues and Terrain conditions

1. What are the different terrain and operational issues in different borders?
2. How are they resolved?
3. Which special committee/ agency overlook the above issues?

Fund and Budget Allocation of BIM

1. Has there been any audits conducted under BIM?
2. What is the number of, and details of audits carried out till date?

Impact on the Local Population

1. What are the effects/impacts on the local population in the border areas where BIM is being carried out?
 - a. Details of these communities and how are they impacted

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- b. What development activities are carried out for local communities in affected border areas?
 - c. Is there any redressal system for public queries and complaints established under BIM?
 - d. How does BIM authorities carry out cooperation and adjustment activities with different local populations and in different areas?
 - e. What are the different re-habitation programs and how are they implemented under BIM?

NITI Aayog Parameters

- Is there any Output/outcome parameters set for BIM by NITI Aayog? If yes, what are they?
- Further details about the same

Issues and Challenges

- What types of Issues are faced in budgetary sanctions under BIM?
- Issues and problems faced during administration process
- issues between different Ministries during BIM implementations?
- intra-state and interstate issues during the implementation?
- issues between state governments and central government during the implementation?
- What is the redressal mechanism used?

Input use Efficiency

- Details of land acquisitions carried out under BIM
- Details of different labour capabilities developed under BIM
- Different energy requirements

Disaster Management on Borders

- Different DM issues faced on the border? Details.
-

-
- DM protocols followed under BIM
 - How does BIM authorities and NDRF/ Defence services work to resolve DM issues?

Technology Utilisation under BIM

- What kind of Technology is being utilized for Border Surveillance?
- No. and types of technology used?
- What Indigenous technology / Imported technology is being currently used?
- No. and other details of CCTVs/ Radars/ other technology currently in use

Combating Crime on Border

- Border wise details of different crimes and their frequency
- Crime combating protocols used on each border
- Annual crime records/reports
- Law enforcement agency that overlook the proceedings of criminals
- MHA guidelines regarding same

BIM Questionnaire 2 – IIPA Evaluation Study

Dated: 13 July 2020

1. Details about CIBMS:
 - a. Share information regarding project BOLD-QIT (Border Electronically Dominated QRT Interception Technique) under Comprehensive Integrated Border Management System (CIBMS).
 - b. What is the current operational status of CIBMS on the Indian Borders?
 - c. What are the issues and challenges involved? Provide Details.
2. DoBM was required to carry out a detailed impact assessment of the scheme in 2019-20 on outcomes such as infiltration levels, security perception, response time, etc. Has the assessment been carried out? Provide details.
3. What was the rationale given by EFC for financial outlay of Rs.8606.00 Crores as against Rs.17048.72 Crores as projected by DoBM for the three financial years period of 2017-2020?
4. Share Details about Induction of high technology surveillance equipment and systems, including space technology in the period between years 2017-2020, and share details of pre-existing technology/equipment currently in use by the Border Guarding Forces (as mentioned in the Cabinet Note). (Also Provide details about Communication equipment, vehicles provided to BGFs)
5. Lack of Technical expertise for newly inducted High-tech surveillance devices hinders the process of optimal utilization of such technology. How is this issue addressed and resolved under BIM Scheme?
6. Give details about the different measures/ technology deployed to tackle problems infiltration, smuggling, illegal immigration issues by different BGFs?
7. Please explain the functions of Provisioning Committee in more details.

8. Share Madhukar Gupta Committee report's recommendations.

9. Whether the following are addressed under BIM? If yes, explain the processes/measures involved:
 - Health facilities for BGFs
 - Welfare facilities for BGFs

10. What is the process of DPR preparation and what are the reasons for Delays in DPR preparation and finalization in general?

11. Please provide a brief overview of the timelines involved in these processes:
 - DPR preparation and finalization
 - Concept Paper preparation
 - In-principle requests and approvals
 - HLEC monitoring process

12. Please explain the general mechanism for resolving of Land acquisition issues.

13. Share details of Scheme Achievements for 2019-2020.

14. Share details of specific achievements of BIM Scheme in terms of strengthening security at international border areas. (Statistics for period between 2017-2020)

15. Please provide any specific suggestions and recommendations by BM-I Division.