

9 PROGRAMME COSTS AND PHASING

The implementation programme has been divided into four periods of 5 years each beginning in 2010-11 and ending in 2029-30. Depending on policies imbued in Vision 2021, Sixth Five Year Plan and other Government's higher level policies proposed projects have been identified for the overall development of Bangladesh Railway. As there is scarcity of resources, all projects cannot be started in the same year or even in one phase. Hence projects need to be implemented phase-wise over the plan period.

A total of 235 number projects costing Tk 2,33,944 crore (USD 30 billion) have been proposed in the Master Plan that will be implemented by Bangladesh Railway over the Plan period of 20 years spanning from Financial Year 2010-11 to Financial Year 2029-30. The numbers of projects and associated costs have been divided into four phases:

Phase-I: In the first phase 113 projects are proposed of which 48 are on-going, 31 are GOB funded new projects and 34 are other new projects funded by Foreign Assistance. Associated costs involvement are Tk 23,782 crore for 48 number on-going projects, Tk 9,925 crore for new 31 GOB projects and Tk 94,264 crore for 34 new Foreign Assistance Projects.

Phase-II: In the second phase there are 48 projects- 25 projects proposed by GOB funded and 23 projects are proposed under Foreign Assistance. In this phase total cost is Tk 28,113 crore with GOB contribution of Tk 9020 crore and Foreign Assistance involvement is Tk 19,113 crore.

Phase-III and Phase-IV: Both the phases have equal number of projects- 37 in each phase and all are proposed to be implemented from GOB fund. Cost for Phase-III is Tk 43,970 crore and for Phase-IV is Tk 33,870 crore.

It is noteworthy to mention here that depending on the circumstances, policy requirements, funding arrangements etc. number of projects in each phase can be rearranged and if this happens associated project costs also will be changed. Besides this, any project proposed under GOB finance can go under Foreign Assistance if Development Partners are interested and similarly any projects proposed under Foreign Assistance can be shifted to GOB fund if it is urgent but no Development Partners show interest.

9.1 Phase I (July 2010- June 2015):

The first phase of the development is scheduled for the five years covering the period July 2010 to June 2015. It is essential to move forwards immediately if the long term plan is to be achieved in a meaningful way. For this reason, efforts should be concentrated upon those priority projects which are in an advanced state of readiness and which will bring immediate benefits from their implementation. As a result, the emphasis has been placed on the maximization of existing resources of current projects. The first phase therefore includes the on-going projects and committed GOB and Foreign Assistance projects that are likely to be completed by June 2015 as listed in Table 10.1 below.

Table 9-1: List of Phase-I Projects (2010-11 to 2014-15 i.e. July 2010 to June2015): On-going:

Sl. No.	Project Name	Cost (Crore Taka)
1	Bangladesh railway sector improvement A. Construction of double line between Tongi & Bhairabbazar with Signalling System B. Reforms of Bangladesh Railway	2288.00
2	Procurement of 1 BG & MG Mixed Under- Floor wheel Lathe Machine	20.33
3	Rehabilitation of Fouzdarhat-CGPY-SRV-CTG Sections In East Zone of BR	87.23
4	Rehabilitation of Rajshahi-Rohanpur Border & Amnura-Chapainawabganj Sections of BR	155.47
5	Rehabilitation of Lalmonirhat-Burimari Sections of BR	174.70
6	Remodelling of Khulna Railway Station & Yard and Development of Operational Facilities of Benapole Railway Station	40.10
7	Dhaka-Chittagong Railway Development Project : 1) Improvement of Pahartali Workshop. 2) Procurement of 11 Nos. MG Locomotives. 3) Consultancy Engineering services for Dhaka-Chittagong Railway Development Project & Skill Development Program. 4) Construction of Double Line Track between Laksam and Chinkiasana. 5) Chittagong Railway Station Yard Remodelling (1st Revised).	2540.73
8	Rehabilitation of Gouripur-Jariajhangail and Shamganj-Mohanganj Sections of BR	180.90
9	Rehabilitation of 200 MG & 60 BG Passenger Coaches for BR.	122.26
10	Export Infrastructure Development Project	1140.43
11	Balance Work of Rehabilitation of Main Line Section of BR (West Zone)	149.87
12	Rehabilitation of Saidpur-Chilahati sections of BR.	185.09
13	Rehabilitation & Modernization of signalling system of 13 stations at Joydebpur-MYN section.	107.49
14	Rehabilitaton & Construction of Pachuria-Faridpur-Bhanga Sections of BR.	267.47
15	Conversion of Parbatipur-Kanchan-Panchagarh & Kanchan-Birol Metre Gauge section Into Dual Gauge section and Birol-Birol Boarder Section	981.71

16	Rehabilitation of Mymensing-Jamalpur-Dewan-Ganj Bazar section of Bangladesh Railway.	212.98
17	Modernization of Saidpur Railway Workshop.	122.22
18	Procurement of 1 no. 60 Ton capacity MG and 1 no. 80 ton capacity BG cranes for accident relief train.	107.16
19	Construction of single line MG Railway Track from Dohazari to Cox's Bazar via Ramu and Ramu to Gundum near Myanmar	1852.35
20	Procurement of 180 Nos. BG Bogie Oil Tank Wagon & 6 nos. BG Bogie Brake Vans (Revised 165 Nos. BG Bogie Oil Tank Wagon & 6 nos. BG Bogie Brake Vans) for Bangladesh Railway.	195.41
21	Procurement of 125 Nos. BG Passenger Coaches.	353.25
22	Procurement of 10 Nos. BG Diesel Electirc Locomotives.	208.61
23	Procurement of 50 Nos. MG flat wagon (BFCT) & 5 Nos. MG brake van with air brake for carrying container.	31.38
24	Rehabilitation of Kalukhali-Bhatiapara section and construction of Kashiani-Gopalganj-Tungi Para new rail line	1101.13
25	Construction of a new railway line from Ishurdi to Dhalarchar via Pabna	982.87
26	Rehabilitation of Laksham-Chandpur section of Bangladesh Railway.	168.67
27	Construction of 2nd Bhairab & 2nd Titas Bridges with approach Rail Lines of BR.	959.21
28	Procurement of 150 Nos. MG Passenger Carriages .	556.31
29	Construction of Khulna - Monla Port rail Link including Feasibility Study	1721.39
30	Procurement of 170 MG Flat bogie wagon and 11 bogie brake van for carrying containers.	96.61
31	Procurement of 264 Nos. MG Passenger Coaches and 2 Nos. BG Inspection Cars.	983.25
32	Rehabilitation of Fateabad-Nazirhat & Sholashhor -Dohazari sections of BR.	203.50
33	Procurement of 30 Nos. BG DE Locomotives .	607.80
34	Procurement of 10 Nos. (3 Unit Set) Diesel Electric Multiple Unit (DEMU) of Bangladesh Railway	331.32
35	Procurement of 100 Nos. MG Bogie Tank Wagon and 5 Nos. MG Brake Vans with air brake equipment for carrying aviation fuel.	77.08
36	Procurement of 20 sets (1 set consists of 3 units) Diesel Electric Multiple Unit (DEMU) for Bangladesh Railway (Revised).	654.43
37	Rehabilitation of Kulaura-Shahbazpur section of Bangladesh Railway	117.68

38	Survey/Feasibility Study for construction of Railway Line from Nazirhat to Panua.	1.98
39	Procurement of 70 MG DE Locomotives for BR.	1945.89
40	Feasibility Study for construction of Railway Line from Navaran to Munsiganj Via Satkhira	11.56
41	Sector Improvement of Bangladesh Railway Under 2nd PFR of ADB : 1) Rehabilitation of Different Station Yards & Extension of Loop Lines between Darshana-Ishurdi-Sirajganj. 2) Improvement of signaling system at 11 stations in Darsana-Ishurdi section. 3) Technical Assistance for supervision of consultancy service for sector improvement projects of BR under 2nd PFR of ADB.	280.79
42	Replacement and modernization of signaling & interlocking system at 11 stations in Chinki astana-Chittagong section of East Zone of BR.	224.68
43	Construction of 3rd & 4th Dual Gauge Railway track between Dhaka-Tongi section and doubling of dual gauge track between Tongi-Joydevpur section including signalling works.	848.60
44	Through Renewal of Worn out Rail and allied works in Chinki astana - Ashuganj Section of BR.	233.92
45	Technical Assistance for Institutional support of BR.	15.98
46	Technical Assistance for feasibility study,safeguard policy study, detailed engineering design & tendering services for project under World Bank funding for World Bank.	13.82
47	Technical Assistance for Project Preparation towards implementation of "Export Infrastructure Development Project" under World Bank (WB) financing.	11.02
48	Technical Assistance for Sub Regional Rail Transport Project Preparatory Facility.	107.58
Total on-going project costs		23,782.21

Phase I: Projects to be taken under GOB Fund only:

Sl. No.	Project Name	Cost (Crore Tk)
1	Rehabilitation of 58 Nos. (41 MG & 17 BG) Locomotives of BR	208
2	Rehabilitation and Up-gradation of Level Crossing Gates of East Zone of Bangladesh Railway.	551
3	Rehabilitation and Up-gradation of Level Crossing Gates of West Zone of Bangladesh Railway.	539
4	Rehabilitation of Important Railway Bridges in East Zone of BR.	136

5	Construction of Broad Gauge Rail Line Between Darsana-Mujibnagar (via Damurhuda) and upto Meherpur.	621
6	Expansion of existing Computer Based Interlocking Colour light Signalling System to the newly Construction 3rd Line four station of Ishurdi-Joydebpur Section in west Zone of Bangladesh Railway.	229
7	Rehabilitation of Sylhet-Chatak Bazar section of Bangladesh Railway.	105
8	Conversion of BG railway line into Dual Gauge from Rajshahi to Abdulpur.	428
9	Construction of overpass/fly over in important level crossing gates in Dhaka.	200
10	Rehabilitation of 200 Nos. MG Passenger Coaches for East Zone of BR.	93
11	Rehabilitation of 50 Nos. MG & 50 Nos. BG Passenger Coaches for West Zone of BR.	42
12	Conversion of Kadamtali, Chittagong bridge workshop into modern track machine & Maintenance shop in East Zone.	150
13	Construction of modern track machine & maintenance shop in West Zone.	345
14	Rehabilitation of Rail line from Jamtoil-Take- of-Point to Sirajgonj Bazar and Conversion of BG railway line into Dual Gauge.	40
15	Feasibility Study for construction of circular MG rail line around Dhaka city.	10
16	Extension and Modernization of Ishurdi and Khulna Loco Shed.	83
17	Extension and Modernization of Diesel Workshop and Carriage Depot of BR.	130
18	Construction of Amnura Bypass line considering one main line (1.3 KM) & one loop line (0.70 K/M).	21
19	Construction of 2 (two) nos. 'B' Class Station at Kaliakoir & Elenga in between Mirzapur-Mouchak Station and Tangail-Bangabandhu Setu East Station.	42
20	Construction of Dual Gauge Standard MG Double Line from Joydebpur to Mymensingh section of BR.	522
21	Rehabilitation of Bhairab Bazar-Mymensingh section of B. Railway.	179
22	Conversion of MG railway line into Dual Gauge from Parbatipur to Kaunia of BR.	490
23	Rehabilitation of existing goods section of Chittagong-SRV-CGPY-Dry Dock section and extension of the same upto Shah Amanat Airport, Chittagong for introduction of Circular Passenger Train Service around Chittagong-SRV-CGPY-Saltgola-Dry Dock-Shah Amanat Airport-Dry Dock-Saltgola-CGPY-Fouzderhat-Chittagong (Phase-1).	209
24	Construction of rail link with Uttara EPZ.	132
25	Rehabilitation of Bonarpara-Kaunia section of BR.	111
26	Procurement of 26 Nos. BG luggage van & 4 nos. BG Shovon chair car with pantry & guard brake.	119
27	Enhancement of productivity of MG PC Sleeper plant at Chatak bazar.	200
28	Remodeling of Parbatipur and Phulbari railway stations of BR.	41

29	Feasibility study for constructing double track in Dhaka-Sylhet, Dhaka-Parbatipur, Dhaka-Rajshahi and Dhaka-Khulna railway corridors.	13
30	Construction of overpass on Gopibag Level Crossing Gate No. E/9 in Dhaka City.	36
31	Contingent projects	3900
Total costs of GOB funded Projects		9925

Phase I: Projects need to be funded by Foreign Assistance

Sl. No.	Project Name	Cost (Crore Tk)
1	Construction of Railway Bridge at Moukuri-Dhala Char point over River Padma to connect Pabna and Rajbari with the existing railway network	1600
2	Construction of Elevated Chord Line from Dhaka to Comilla.	15000
3	Construction of separate dual gauge double line railway Bridge over river Jamuna parallel to the existing Bangabandhu Bridge.	8000
4	Construction of a new Carriage Workshop inside Saidpur Workshop of BR.	415
5	Construction of Dual Gauge line in Dhaka-Narayanganj section.	416
6	Construction of Inland Container Depot (ICD) near Dhirasram Railway Station.	1200
7	Construction of 2nd Rail-Cum-Road Bridge over the river Karnafuli (near Kalurghat Bridge).	1050
8	Construction of Double Line from Laksam to Akhaura.	3250
9	Procurement of 70 BG Air Conditioned Passenger Coaches for BR.	605
10	Replacement and modernization of signaling & interlocking system at 20 stations between Ishurdi-Parbatipur and 5 stations between Rajshahi-Abdulpur.	300
11	Construction of Bangladesh portion of Akhaura-Agartala rail link.	500
12	Construction of connecting railway links from Tungipara to Faqirhat and via Rupsha to Mongla port.	1500
13	Procurement of 200 MG Passenger Coaches for BR.	1342
14	Construction of BGML Standard Double Line from Akhaura to Sylhet including Signalling.	7000
15	Construction of BGML Standard Double Line from Khulna to Parbatipur including Signalling	8600

16	Procurement of 3 Nos. MG Diesel Electric Locomotives connecting with 2 Nos. new AC Trains with 40 Nos. AC Passenger Coaches for Dhaka-Chittagong and Dhaka-Sylhet routes.	500
17	Construction of Rail Bridge Over the river Jamuna near Bahadurabad – Phulchari Ghat.	16000
18	Constructuon of of a Diesel Electric Multiple Unit (DEMU) Maintenance workshop in Chittagong/Dhaka and two different EEMU inspection Sheds in Dhaka and in Chittagong.	50
19	Replacement and modernization of signaling & interlocking system at 23 stations in Shantahar-Bonarpara-Lalmonirhat section of West Zone of BR.	375
20	Procurement of 100 MG & 50 BG Stainless Steel Passenger Coaches for BR.	1082
21	Expansion of Meter Gauge Concrete Sleeper Plant of Chatak Bazar into Broad Gauge and Dual Gauge Concrete Sleeper Plants.	101
22	Procurement of 5 sets (1 set consists of 6 units) of BG Diesel Electric Multiple Unit (DEMU) for introducing commuter trains in Broad Gauge sections.	375
23	Construction of railway line from Bhanga to Mawa including rail link over Padma Bridge.	3046
24	Construction of Railway Line from Dhaka to Mawa.	3046
25	Construction of new Meter Gauge Rail Link between Bogra and Sadanandapur via Sirajgonj Raipur.	1510
26	Introduction of Electric Traction in Dhaka-Chittagong Railway Corridor	8000
27	Replacement and modernization of signaling & interlocking system at 3 stations in Ashugonj-Akhura section of BR.	40
28	Construction of Double Railway Line from Khulna to Darshana.	1702
29	Construction of Broad gauge line between Bhanga-Jessore.	2500
30	Construction of new broadgauge line between Bhanga-Barisal.	2858
31	Procurement of 400 MG Passenger Coaches for BR.	2080
32	Capacity enhancement of Railway Training academy (RTA) through improvement of training modules and facilitate other logistics.	172
33	Capacity enhancement for project management in BR.	39
34	Environmental Audit of Bangladesh Railway.	10
Total costs of the possible foreign aided projects		94264

9.2 Phase II (July 2015- June 2020):

The second 5 year phase includes the projects listed in Table 9-2. These are expected to be implemented by the period from July 2015 to June 2020 (2015-16 to 2019-20).

Table 9-3: Phase II: Projects to be taken by GOB Fund

Sl. No.	Project Name	Cost (Crore Tk)
1	Construction of Meter Gauge Double line in DG Standard from Mymensingh to Jamalpur of BR.	1200
2	Procurement of 100 Nos. BG Coaches for BR.	660
3	Procurement of 200 Nos. MG Coaches for BR.	1000
4	Modernization of Saidpur Bridge Workshop of West Zone of BR.	750
5	Procurement of 145 Nos. BG Bogie Oil Tank Wagon & 5 Nos. BG Bogie Brake Vans for BR.	180
6	Rehabilitation of Jamalpur-Tarakandi section of BR.	350
7	Construction of rail link with Ishurdi EPZ.	150
8	Repair & Rehabilitation of Locomotive Workshops, Carriage & Wagon Workshops, Loco sheds and Carriage & Wagon Depots of BR for capacity enhancement.	1600
9	Rehabilitation of Important Railway Bridges in West Zone of BR.	200
10	Feasibility Study for constructing Ashugonj-Noapara Chord line for BR.	30
11	Construction of overpass/flyover on all important Level Crossing of BR (Phase-I)	1000
12	Rehabilitation of 200 Nos. MG Passenger Coaches for East Zone of BR.	200
13	Rehabilitation of 150 Nos. BG Passenger Coaches for West Zone of BR.	250
14	Renovation of Central Railway Building in Chittagong as a Heritage Building including beautification of surrounding areas of CRB.	25
15	Construction of a new BG & DG Concrete sleeper Plant at Parbatipur.	300
16	Procurement of 100 Nos. MG Bogie Oil Tank Wagon & 5 Nos. MG Bogie Brake Vans for BR.	150

17	Repair & Rehabilitation of Wooden Sleeper Treatment Plant of BR.	10
18	Feasibility Study for constructing Railway line from Hathazari to Rangamati.	15
19	Feasibility Study for constructing Railway line from Hathazari to Khagrachori.	15
20	Re-opening of Lalmonirhat-Moghalhat section.	50
21	Development of Darshana Inter-change Yard.	50
22	Development of Rohonpur Inter-change Yard.	50
23	Construction of Railway Bypass for Abdulpur, Parbotipur & Kawnia.	250
24	Construction of Chilahati-Chilahati Boarder Railway line.	35
25	Re-opening of Rupsha-Bagherhat Railway line.	500
Total costs of the GOB funded projects for Phase- II		9020

Phase II: Projects expected to be funded during phase-2 by Development Partners

Sl. No.	Project Name	Cost (Crore Tk)
1	Construction of Elevated Circular Rail Line around Dhaka City.	2500
2	Construction of Dual Gauge Double Track from Joydebpur to Bangabandhu Bridge East.	2600
3	Construction of Dual Gauge Double Track from Bangabandhu Bridge West to Ishurdi.	2600
4	Procurement of 100 Nos. Broad Gauge AC passenger carriages for BR.	800
5	Replacement and modernization of signaling & interlocking system at 20 stations between Ishurdi-Parbatipur and 5 stations between Rajshahi-Abdulpur.	600
6	Construction of connecting railway link from Tungipara to Fakirhat via Rupsha to Mongla port.	2500
7	Introducing Ticket Punching System in important stations of BR.	250
8	Rehabilitation of Shayestagonj-Balla section of BR.	300

9	Procurement of 100 Nos. Broad Gauge stainless steel passenger carriages for BR.	1200
10	Installation of 33/11 KVA 10 MVA Sub-Station and Power supply system in Dhaka.	100
11	Feasibility study for constructing connectivity with Sonadia deep sea port.	20
12	Human Resource Development of BR Officials and Personnel through skill development training.	100
13	Preparatory Technical Assistance in Investment Projects for Regional Railway Connectivity.	18
14	Conversion into Dual Gauge of Santahar-Bogra-Kawnia section.	3000
15	Strengthening/Reconstruction of Hardinge Bridge.	1500
16	Improvement of ICT Infrastructure of BR.	400
17	Enhancement of beautification & commercial use of station areas of Dhaka, Tejgaon, Cantonment, Airport, Narayanganj & Tongi station.	100
18	Enhancement of beautification & commercial use of station areas of Chittagong, Sylhet & other important stations of East Zone of BR.	150
19	Enhancement of beautification & commercial use of station areas of Rajshahi & other important stations of West Zone of BR.	200
20	Introducing Computer based Automatic Train Operation System in BR.	50
21	Feasibility study for constructing Railway line from Barisal to Kuakata.	25
22	Skill Development Program for use of LOB system and ERP Software.	50
23	Human Resource Development Program for BR (Phase-2).	50
Total costs of expected Foreign Assistance Projects during Phase-II		19113

9.3 Phase-III (July 2020- June 2025):

The third 5 year phase starts from 2020-21 to 2024-25 and includes the projects listed in Table 10.3.

Table 9-4: Railway Development Projects to be taken during July 2020 to June 2025:

Sl. No.	Project Name	Cost (Crore Tk)
1	Conversion into Dual Gauge Track of Dhaka-Khulna Corridor.	7500

2	Construction of Railway connectivity with Cox's Bazar Deep Sea Port.	1000
3	Construction of Railway connectivity in between Panchagor-Chilahati-Hatibandha of BR.	1500
4	Construction of Railway connectivity between Hathazari-Rangamati.	1800
5	Construction of Rail line from Barisal to Kuakata.	3000
6	Construction of circular rail line around Dhaka city.	4000
7	Construction of Rail line from Jamalpur to Tourism Spots of Sherpur.	3000
8	Rehabilitation of Main Line section of BR (East Zone) Phase -I	1000
9	Rehabilitation of Main Line section of BR (West Zone) Phase - I	1000
10	Rehabilitation and Reconstruction of station buildings of East and West Zones of BR (Phase - I)	500
11	Rehabilitation and Reconstruction of Residential & Service buildings of East and West Zones of BR (Phase - I)	500
12	Rehabilitation of Major Bridges of East and West Zones of BR (Phase-1).	1000
13	Modernization of Railway Training Academy and construction of Railway Museum with enhancement of training facilities.	500
14	Introduction of Electric Traction in Khulna-Parbotipur section.	5000
15	Construction of flyovers over important Level Crossing Gates of East & West Zones of BR (Phase - I)	500
16	Strengthening of Track Maintenance Units of BR.	200
17	Modernization of Railway Hospitals & Construction of Medical Colleges in Dhaka & Chittagong of BR.	600
18	Rehabilitation & Modernization of Workshops of BR (Phase-1).	500
19	Rehabilitation & Modernization of Signalling System of Dhaka-Chittagong Section.	500
20	Rehabilitation & Modernization of Signalling System of Joydebpur-Jamtoil Section.	200
21	Rehabilitation & Modernization of Signalling System of Jamtoil-Ishurdi Section.	200
22	Modernization of Railway Train Control System of BR for the purpose of the development of Train Control System.	200
23	Procurement of Track Maintenance Instruments for BR.	100

24	Procurement of Track Tamping and Ballast Regulator Machines for BR.	200
25	Procurement of Track Laying Machine for BR.	100
26	Rehabilitation of 50 Nos. BG Diesel Electric Locomotive of BR.	300
27	Rehabilitation of 50 Nos. MG Diesel Electric Locomotive of BR.	250
28	Rehabilitation of 250 Nos. BG Passenger Coach of BR.	250
29	Rehabilitation of 250 Nos. MG Passenger Coach of BR.	200
30	Rehabilitation of 250 Nos. BG Wagon of BR.	150
31	Rehabilitation of 250 Nos. MG Wagon of BR.	120
32	Procurement of BG Locomotives for BR (Phase - I)	2000
33	Procurement of MG Locomotives for BR (Phase - I).	2000
34	Procurement of BG Coaches for BR (Phase - I).	1500
35	Procurement of MG Coaches for BR (Phase - I).	1000
36	Procurement of Flat Container Wagons including Brake Vans for BR (Phase - I).	800
37	Procurement of Oil Tank Wagons including Brake Vans for BR (Phase - I) .	800
Total costs for the Phase-III proposed projects		43970

9.4 Phase-IV (July 2025- June 2030):

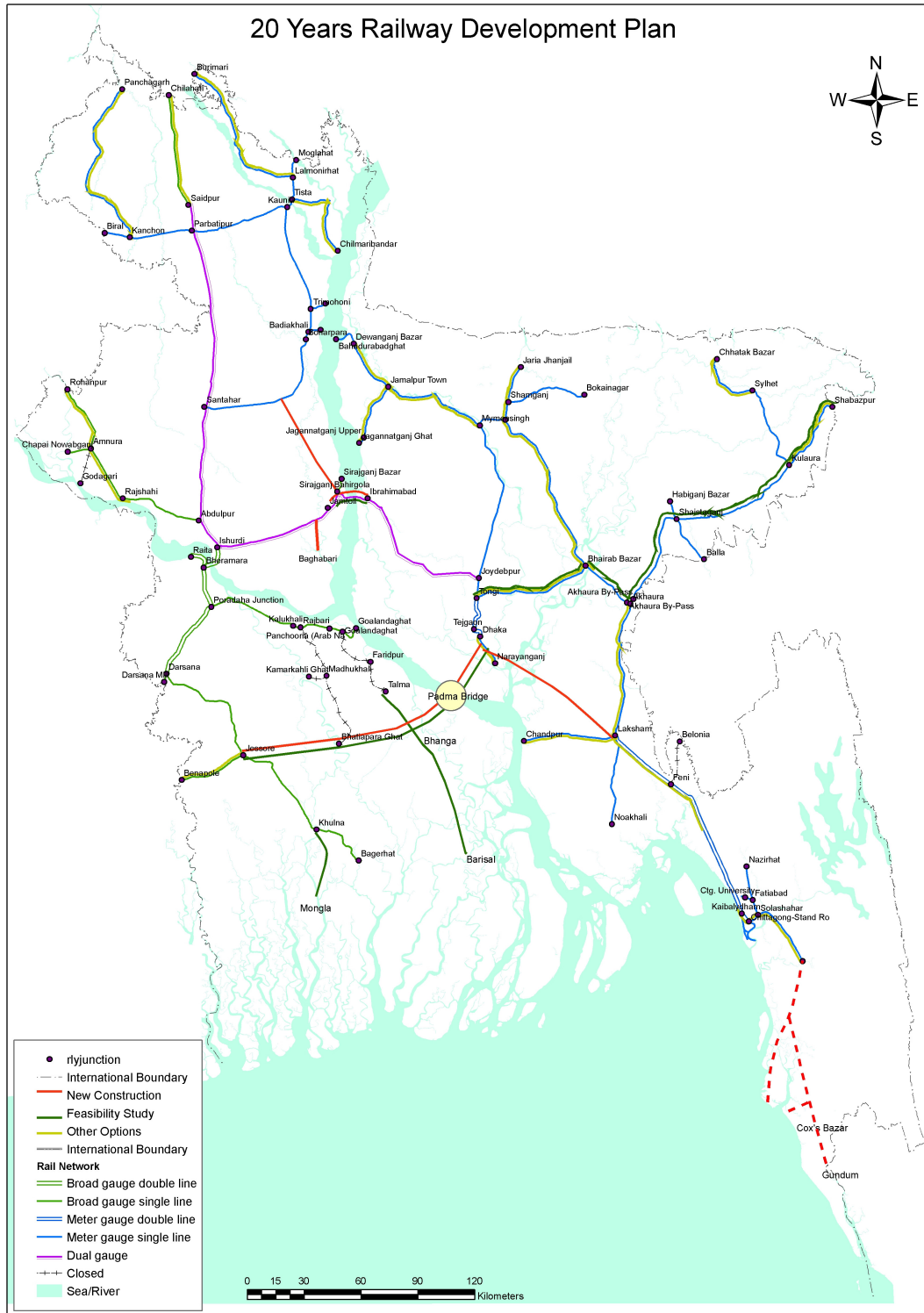
Phase-IV is the last phase of the Railway Master Plan that starts from Financial Year 2025-2026 and ends in Financial Year 2029-30. The final phase includes the projects listed in Table 10.4 below:

Table 9-4: Railway Projects to be taken during July 2025 to June 2030:

Sl. No.	Project Name	Cost (Crore Tk)
1	Construction of Railway connectivity between Nagirhat-Khagrachori.	4000
2	Construction of Railway connectivity with Bandarban.	1000

3	Construction of Railway connectivity between Khulna-Barisal.	3000
4	Construction of Railway Line from Navaran to Munsiganj Via Satkhira.	3000
5	Rehabilitation of Main Line section of BR (East Zone) Phase - II	1000
6	Rehabilitation of Main Line section of BR (West Zone) Phase - II	1000
7	Rehabilitation and Reconstruction of station buildings of East and West Zones of BR (Phase - II)	500
8	Rehabilitation and Reconstruction of Residential & Service buildings of East and West Zones of BR (Phase - II)	500
9	Rehabilitation of Branch line of BR (East Zone)	500
10	Rehabilitation of Branch Line of BR (West Zone).	500
11	Rehabilitation of Minor Bridges of East and West Zones of BR (Phase-2).	500
12	Construction of Railway Training Institute in Dhaka and Rajshahi.	300
13	Introduction of Electric Traction with constructing Dual Gauge Double Track in Akhura-Sylhet section.	2000
14	Construction of flyovers over important Level Crossing Gates of East & West Zones of BR (Phase - II)	1000
15	Introducing High Speed Train Communication in important corridors of BR.	2000
16	Modernization of Railway Hospitals & Construction of Medical Colleges in Khulna, Rajshahi & Saidpur of BR.	600
17	Rehabilitation & Modernization of Railway Hospitals in East & West Zones of BR.	500
18	Rehabilitation & Modernization of Workshops of BR (Phase-2).	500
19	Rehabilitation & Modernization of Signalling System of Akhura-Sylhet Section.	300
20	Rehabilitation & Modernization of Signalling System of various stations of East Zone of BR.	300
21	Rehabilitation & Modernization of Signalling System of Khulna-Parbotipur Section.	500
22	Rehabilitation & Modernization of Signalling System of various stations of West Zone of BR.	300
23	Introducing Centralized Seat Reservation Ticketing System for BR.	200
24	Modernization of Central Wagon Control System of BR.	200

25	Procurement of Crane for the use in Relief Train.	300
26	Rehabilitation of 50 Nos. BG Diesel Electric Locomotive of BR.	300
27	Rehabilitation of 50 Nos. MG Diesel Electric Locomotive of BR.	250
28	Rehabilitation of 500 Nos. BG Passenger Coach of BR.	250
29	Rehabilitation of 250 Nos. MG Passenger Coach of BR.	200
30	Rehabilitation of 250 Nos. BG Wagon of BR.	150
31	Rehabilitation of 250 Nos. MG Wagon of BR.	120
32	Procurement of BG Locomotives for BR (Phase - II).	2000
33	Procurement of MG Locomotives for BR (Phase - II).	2000
34	Procurement of BG Coaches for BR (Phase - II).	1500
35	Procurement of MG Coaches for BR (Phase - II).	1000
36	Procurement of Flat Container Wagons including Brake Vans for BR (Phase - II).	800
37	Procurement of Oil Tank Wagons including Brake Vans for BR (Phase - II).	800
Total project costs during the phase-IV		33870



10 THE WAY FORWARD

The implementation of the Railway Master Plan relies on a massive expansion in resources devoted to infrastructure development and maintenance, procuring new rolling stock and improved maintenance practices. The total investment proposed over the Plan period of 20 years is Tk 2, 33,944 Crore i.e. USD 30 billion. This investment should result in a revenue increase from traffic⁵ from around Tk 300 Crore in 2006, to almost Tk 1,200⁶ Crore by 2030, at constant prices – a growth of over 6% per year. But Bangladesh Railway has already increased its fare level on by 50% in the year 2012. Based on this revenue increase will be about 1500 crore per year. Besides adopting necessary measures to improve overall service quality both for passengers and goods, a focusing on market-awareness and customer relations Bangladesh Railway have great potential to increase its revenue to expected level. Thus Bangladesh Railway will be able to serve the operation system in a sustainable way.

Reform of the railway in this way, accompanied by institutional change is of paramount importance for the future of BR. The Asian Development Bank is funding assistance to BR to achieve these ends. With reform in place, and the adoption of a clear plan for the next 20 years, BR will be in strong position to attract private sector and development partner funding to assist implementation of the plan. It is recommend that once reforms are in place, the components of the plan are examined to determine where external source of finance (to implement the plan) can be deployed.

Now the Government of Bangladesh has created a separate Ministry i.e. Ministry of Railways giving emphasis on railway transport for the country. Hence any railway related development projects and organizations must be under the Ministry of Railways. As such recently created Company for MRT in Dhaka under the Ministry of Communications should be placed under the Ministry of Railways. It is suggested that Ministry of Railways take necessary actions in this regard.

The success of the Master Plan and achievements of Bangladesh Railway mainly will depend on the timely implementation of bringing uniformity of the existing mixed Gauge into Broad Gauge through the country, construction of separate Rail bridges, ICD at Dhirassram, connectivity with neighbouring countries and deep sea port at Sonadia, modernization and expansion of Railway existing Workshops at suggested in the Master Plan.

Another important issue is that population density of Bangladesh is the highest in the word. It supports the extension of railway network throughout the country. But at present many of the districts of the country are not connected by railway. As such BR should connect at least all the District Head Quarters with its network. Connecting of District Head Quarters with railway network will reduce pressure on road infrastructure both for passengers and freight traffic providing opportunities low cost transport services.

The implementation of the Plan will require capacity building within BR's management, and it is recommended that the Railway Academy in Chittagong introduces modern management, project management and financial management course specifically aimed at senior and project managers within BR.

The phasing of the investment assumes that the most of the construction projects will be fully complete by the end of Phase 4. There are some concerns expressed about the ability to mobilize finance, design and construct all of the projects within this short time span.

⁵ Excluding miscellaneous revenue

⁶ Fares and tariffs held constant in real terms, except for inter-city fares

However, if the financing sources could to be identified and ensured, the railway network could be completed within the plan period. The first review of the Railway Master Plan should be scheduled after the first five years and, by then, the progress will be well documented to enable any re-phasing required to accelerate the program for next phases.

Finally, this plan is a starting point for a shift in the way in which Bangladesh addresses transport investment, and provides a platform for a shift towards investment in rail for the best social, economic and sustainable reasons. When the Integrated Multi-modal Transport Policy (IMTP) is approved by the Government of Bangladesh, an integrated investment programme for all modes of transport should be prepared, to allow the provisions of the IMTP to be implemented. BR is expected to play a significant role in this regard.