Welcome to a Lecture on

COSTING

&

PRICING ISSUES

IN

TRANSPORT SECTOR

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Outline of the Lecture

- Indian Railway Act.
- Functions of Rates Branch.
- Cost of service & Value of service.
- Traditional Freight Structure.
- Classification of Goods.
- Freight rates for different classes.
- Container Train Operators.
- Passenger Fares.

Outline of the Lecture

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Outline of the Lecture

- Indian Railway Act.

Indian Railway Act

- Railway Act 1989.
- Chapter VI deals with Fixation of Rates.
- Section 30 (1)
- The Central Government* may
  - from time to time,
  - by general or special order fix,
  - for the carriage of passengers and goods,
  - rates for the whole or any part of the railway.
  - Different rates may be fixed for different classes of goods, and
  - specify in such order the conditions subject to which such rates shall apply.

Indian Railway Act

- Section 30 (2).
- The Central Government may by a like order,
  - fix the rates of any other charges incidental to or connected with such carriage,
  - including demurrage and wharfage,
  - for the whole or any part of the railway, and
  - specify in the order the conditions,
  - subject to which such rates shall apply.

Indian Railway Act

- Section 31
- The Central Government shall have power to :
  - (a) classify or reclassify any commodity for the purpose of determining the rates to be charged for the carriage of such commodities.
  - (b) increase or reduce the class rates and other charges.

Indian Railway Act

- Section 32
- Notwithstanding anything said in this Chapter, a railway administration* may,
  - in respect of the carriage of any commodity, and
  - subject to such conditions as may be specified;
  - (a) quote a station to station rate,
  - (b) increase or reduce or cancel a station to station rate,
  - (c) withdraw, alter or amend the conditions attached to a station to station rate, and
  - (d) charge any lump sum rate.

Indian Railway Act

- As per Section 32, power of the Zonal Railway is limited only to quoting of station to station rates.
- However, nothing in the Railway Act prevents the Central Government from delegating any of the powers in respect of Sections 30, 31 and 32 to Zonal Railways.
- Either some or even all of them can be delegated.*
- It's a different matter that Zonal Railways don't want these powers to be delegated.*
- Central Government means Ministry of Railways.
- Railway Board is a separate entity.*
- Discharging of dual function.*
- Defence Ministry and Army Hdqrts.
- Example of other countries.*

Indian Railway Act

- Section 70.
  - A railway administration shall not make any or give any undue or unreasonable preference or advantage to,
  - in favour of any particular person or any particular description of traffic in the carriage of goods.

Indian Railway Act

- Section 71 (1).*
  - The Central Government may if it is of the opinion that it is necessary in the public interest to do so,
  - by general or special order, direct any railway administration –

Indian Railway Act

- (a) to give special facilities for, or preference to,
- carriage of such goods or class of goods consigned by or to
- the Central Government or the Government of any State, or
- of such other goods or class of goods.
- (b) to carry such goods or class of goods by such route or routes and at such rates;
- (c) to restrict or refuse acceptance of such goods or class of goods at or to such station of carriage,
- as may be specified in that order.

Indian Railway Act

- Section 71.
- (2) Any order made under sub-section (1) shall cease to have effect after the expiration of a period of one year from the date of such order,
  - but may, by a like order, be renewed from time to time for such period not exceeding one year at a time as may be specified in the order.
- (3) Every railway administration shall be bound to comply with any order given under sub-section (1), and
  - any action taken by a railway administration in pursuance of any such order shall not be deemed to be a contravention of section 70.*

Indian Railway Act

- Section 72.
- (1) The gross weight of every wagon when loaded to its maximum carrying capacity,
  - shall not exceed such limit as may be fixed by the Central Government.
- (2) Subject to the limit fixed under sub – section (1), every railway administration shall determine the normal carrying capacity for every wagon.*

Indian Railway Act

- Section 73.
- Where a person loads goods in a wagon beyond its permissible carrying capacity as exhibited,
  - a railway administration may, in addition to the freight and other charges,
  - recover from the consignor, the consignee or the endorsee, as the case may be,
  - charges by way of penalty at such rates, as may be prescribed, before the delivery of the goods.

Indian Railway Act

- Section 78.
- Notwithstanding anything contained in the railway receipt, the railway administration may, before the delivery of the consignment, have the right to
  - Re–measure, re–weigh or re–classify any consignment;
  - re–calculate the freight and other charges; and
- correct any other error or collect any amount that may have been omitted to be charged.

Outline of the Lecture

- Indian Railway Act.
- Functions of Rates Branch.

Functions of Rates Branch

- Decision regarding freight rates of different commodities is a centralized function of Central Government.
- As per Railway Act this power vests only with Ministry of Railways.
- Independent of Ministry of Finance.
- Railway Board need not go even to Parliament for increasing/decreasing of railway freights.
- This has been so legislated in order to ensure that there is uniformity of freight rates throughout the country.
- Historical background of company railways.*
- Provides for better seamless operations as far as realization of freight charges are concerned.*

Functions of Rates Branch

- The first exception is in case of giving station to station rates by zonal railways.
- The second exception is in case of giving of rebates under specified laid down schemes, where powers have been delegated to Zonal Railways.*
- In second case, maximum upper limits have been laid down for giving of rebates.*
- Zonal railways as also our customers prefer it to be that way.*

Functions of Rates Branch

- Rebates/Surcharges can either be across the board for all zonal railways, or
  - they could be for a particular zone.
- Rebates/Surcharges can be :
  - either for all commodities or for a particular commodity.*
  - They could be either for a specific period* or could be of a permanent nature*.
  - They could be either for certain distances or across all distance boundaries.
  - For certain streams of traffic.
- Fact remains that all rating activity is confined only to Ministry of Railways.

Functions of Rates Branch

- Subject list of TC/CR branch are as follows :
  - Research and review of freight rates, passenger fares, parcel rates.
  - Examine costing for freight, passenger and parcel services.
  - Collection/compilation of information and data for conducting studies on different aspects of commercial working and all other ancillary matters.
  - Formulation of new schemes and policies for maximizing railway earnings.
  - Review of existing rules to bring in simplification, transparency and to reduce the work of field offices.

Functions of Rates Branch

- Conducting specific studies on commercial matters in line with reports of various committees such as
  - Railway Fare and Freight Committee and
  - Rail Tariff Enquiry Committee etc.
- Memorandum to the Board and Cabinet on proposals received from other Ministries for revision of rates in respect of specific commodities.

- Formulation of Budget Document – Proposals for adjustments in Freight Rates and Passenger Fares in the Railway Budget.*

Functions of Rates Branch

- Subject list of TC/R branch are as follows :
  - Freight Incentive Schemes.
  - All types of freight concessions.
  - Classification of goods.
  - Packing conditions of goods.
  - Miscellaneous charges.
  - Charges related to Port Trust.
  - Transport of relief materials to affected areas.
  - Chargeable weight for commodities.
  - Train load benefit.
  - Distance for charge, Inflation in distance for charge.
  - Re–weighment charges.
  - Clubbing of consignment.

Functions of Rates Branch

- Subject list of TC – I branch are as follows :
  - Free time and demurrage and wharfage rules.
  - Siding & Shunting charges.
  - Through distance freight.
  - Military tariff rates.
  - Notified stations.
  - All India Engine Hour cost.
  - PCO in CRT.
  - Railway Rates Tribunal Rules.
  - Agreements relating to Port Trust.
  - Commercial aspects regarding Indo – Pakistan, Indo – Bangladesh Indo – Nepal traffic.*

Functions of Rates Branch

- Rules for payment of freight – Paid, To – Pay, Prepayment conditions etc.
- Rules for delivery of goods.
- Undercharges in freight.
- Weighbridges.
- Penalties for overloading of wagons etc.
- Wagon Registration Fees.
- E – Payment of freight.
- Working of goods sheds.
- Rules for carriage of dangerous goods.
- Notified stations.
- Licensing of railway land.

Outline of the Lecture

- Indian Railway Act.
- Functions of Rates Branch.
- Cost of service & Value of service.

Cost of service & Value of service

- There are two principles which mainly decide the fixation of railway rates namely :
  - Cost of service and
  - Value of service.

Cost of service & Value of service

- Cost of service :
  - Such charges must in no case be less than the cost to the railway management of rendering the required service.
  - This should be the lower limit of the freight rate.
- Value of service :
  - They must in no case be more than the value of the service to the customers.
  - This should be the upper limit of the freight rate.

Cost of service & Value of service

- Railway charges ought to be based on the cost incurred in rendering
  - either a particular service, or
  - the entire gamut of rail services.
- For services like transportation conducted under monopolistic conditions, the ideal system of charging would be
  - to ascertain the cost of each service rendered, and
  - to allow a reasonable margin of profit over and above that amount.
- But such a basis is impossible as no one knows as to what is the exact cost of transportation.

Cost of service & Value of service

- This basis is difficult to implement, because it is impossible to ascertain the cost of any railway services;
  - none of the fixed charges, and
  - very few of the operating expenses can be assigned;
  - except rather arbitrarily to the various services.*
- Railway cost being uncertain and fluctuating, a rate based purely on the cost of service rendered will have no relation to the capacity of the commodity to bear it.
- Thus it is difficult to find any positive, objective basis for a system of railway rates based on costs.

Cost of service & Value of service

- In addition to above, rates must be fixed in advance before the service is rendered, and
  - cost can be known only after the service has been rendered;
  - that too only approximately.
- Another problem is the system of joint costs.*
- Since the railway system is used for diverse goods and services, it is similar to a plant that makes multiple commodities and requires joint costing.*
- It is impossible to base railway rates on the principle of cost of transportation alone.
- Cost is of secondary importance in any practical exercise for pricing.

Cost of service & Value of service

- Following are some of the factors that used to be taken into consideration in determining the cost of service :
  - Loadability.
  - Susceptibility of the commodity to damage and railway's liability for claim compensation.
  - Special handling or special type of wagons required.
  - Extent to which the commodity may cause damage to other commodities.
  - Quality and regularity of movement.
  - Empty haulage involved in providing transport.

Cost of service & Value of service

- It is the value of service which determines the rail users ability to pay.
  - In case of goods, the ability to pay depends largely upon their value, and
  - in case of passengers, it largely depends upon ntheir incomes.
- If goods of small value and passengers with lower incomes are to be carried, low charges must be made.
- This is why the ability to pay implies division of goods traffic into classification scales and
  - passenger traffic into different classes of traffic.

Cost of service & Value of service

- Since alternative means of transportation is available to rail users,
  - Railways cannot charge up to the physical limit of the rail user can bear; but
  - only up to the limit of what he is willing to bear.

Cost of service & Value of service

- It is the principle of joint costs which justifies discrimination by the railways.
- Commodities classified at higher classes are made to pay not only their approximate share of general costs, but in addition,
  - that share of the joint cost which the low rated commodities cannot afford to pay.
- Similarly, higher class passengers pay more because they can afford to pay more, and
  - it will enable railways to carry second class passengers at lower fares.

Cost of service & Value of service

- Following are some of the factors that are taken into consideration in determining the value of service :
  - Value of the commodity at the destination as compared with the value at the originating station.
  - Competition from other modes of transportation.
  - Potential competition from new sources of production and new markets.
  - Classification of comparable and related commodities.

Cost of service & Value of service

- Studies in traffic costing and cost difference shows that
  - Average haulage cost per km. declines with distance.
  - Element of terminal cost remains the same irrespective of whether the traffic is short distance or long distance.
- These two factors together prove that the principle of telescopic rates is most scientific and is justified on the basis of the fact that
  - Rail user has limited capacity to pay for long distance traffic.
  - It costs less to the railways to carry traffic for longer distances.

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- Cost of service & Value of service.
- Traditional Freight Structure.

Traditional Freight Structure

- Country wide uniformity in tariff.
- Uniform telescoping of rates for all commodities.
- No regional, directional, seasonal or segmental sensitivity.
- Tenuous linkage with input costs.
- Cross subsidization across various commodity groups.
- Unlimited subsidization of losses on Passenger services.
- Driven by imperatives of revenue generation.
- Adjustments in tariff arduous and time consuming.
- Averse to business decisions and steeped in straitjacket.
- Oblivious to market conditions and business opportunities.

Traditional Freight Structure

- Ad hoc tariff adjustments with no comprehensive long term view.
- Unable to respond effectively and timely to customer demands.

Traditional Freight Structure

- From the traditional freight structure IR gradually tried to move to more commercially based freight structure.
- Introduce integrated tariff and incentive structure custom tailored for each major business stream – present and potential.
- Tariff should be based on input costs and leverage railway's strengths in long haul and bulk.
- Reduce cross subsidization amongst commodity groups.
- Eliminate tariff lines operating below cost.*
- Move towards FAK rates as far as possible with only limited exceptions.

Traditional Freight Structure

- Quantum of cross subsidization of passenger business from freight segment should be explicit and transparent.
- Comprehensive recasting of tariff for military, postal traffic etc.
- Long term goal for tariff structure rationalization should be spelt out.

Traditional Freight Structure

- Institutionalization of mechanisms for seasonal, regional, directional and other variations.
- Introduce differential pricing in the bulk segment to drive revenue growth.
- Promote long term arrangements with corporate clients.
- Promote growth of business volumes through negotiated packages.
- Promote cargo aggregators and other new business streams as potentially high revenue segments.
- Enabling mechanisms for revenue maximization from idle assets and under utilized capacities with speedy offer of rates.

Traditional Freight Structure

- Miscellaneous charges.
  - Inflated distance for charge.
  - Charges for Port Trust Railways.
  - Charges for haulage of engines.
  - Surcharge for ‘To Pay’ traffic.

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- Classification of Goods.

Classification of Goods

- All commodities have been classified into 16 different classes for the purpose of charging of freight.
- Base class is class 100.*
- Lowest class whose freight is cheapest is LR – 4.
  – This is equivalent to class rate of 60.
- Highest class whose freight is maximum is 200 for Petroleum products.*
- All other commodities come somewhere in between.
- Over the years railways have gradually reduced the number of classes from 59 to 15.
- It has been attempted to fit all commodities into one of these existing classes only.*

Classification of Goods

- Along with reducing the number of classes, the total number of commodities which have been so classified have also been reduced.
- Over the years railways have reduced the total number of classified commodities from over 4000 to only 21 groups.
- An over – riding clause stipulates that if any commodity does not figure in the list of commodities which have been classified,
  – then it should be charged at the highest class rate.*
- Type of wagon wise classification.*

Classification of Goods

- Logic given was that railways are simplifying the freight structure and will be easier for customers to understand.*
- This reduction in number of commodities has been incorrect.
- After all if 4000^{+} number of commodities were being transported by railways earlier,
  - then even today more or less the same number of commodities are likely to be transported.
- There may have been some reduction in commodities due to block rake movement,*
  - but such reduction would have been maybe 20% – 30% at the most.
- It cannot justify such drastic reduction.

Classification of Goods

- As a result of number of classified commodities having been reduced,
  - there are large number of commodities which do not have any class at all.
- Present rules stipulate that all of them are to be charged at a uniform class rate depending on type of wagon.
- As a result of the above some of these commodities have moved to road.
- Secondly, by reducing the number of classes from 59 to 15, the gap between freight rates of adjoining classes has substantially increased.
- Any change of class even by one step increases the freight rate substantially.

Classification of Goods

- As of today the following classes exist :
- LR – 4 Bamboos, Coffee, Tea, Coir, Cotton.
- LR – 3 Charcoal, Paper.
- LR – 2 Fireworks.
- LR – 1 Jute, Organic manure, Timber.
- Class 100 Leather, Rubber & Plastic, Edible oil.
- Class 110 De – oiled cake, Sugar, Salt.
- Class 120 Clay, Oil cake and Seeds, Fly ash.
- Class 130 Fertilizer*, Foodgrain*, Steel Pipes, Wire rod coils.

Classification of Goods

- Class 140 Caustic Soda, Slag, Edible Oils.
- Class 150 Cement*, Coal & Coke*, Clinker, Molasses, Gypsum, Sand & Stones.
- Class 160 Minerals & Ore, Metal scrap, Pig Iron.
- Class 170 Bitumen.
- Class 180 Iron Ore for domestic*, Alloys & Metals, Iron & Steel, LPG.
- Class 190 –
- Class 200 Acids, Alcohol, Petroleum products.

Classification of Goods

- Chargeable carrying capacity was made uniform with effect from 1.4.2005, and
  - minimum weight condition was done away with.
- Consignments carried in any type of wagon will be charged as per the Prescribed Carrying Capacity (PCC) of that type of wagon.*
- For example, earlier bamboo being a light commodity was charged for a minimum weight of 22T.
- As per the revised PCC, consignment of bamboo was charged for the full carrying capacity of the BCN wagon at 63T.
- This resulted in substantial amount of idle freight being paid for such light weight consignments.

Classification of Goods

- In order to compensate for the idle freight and reduce the same to a large extent,
  - the classification of light weight commodities was reduced in number of cases,
  - in order to bring down the overall freight.

Classification of Goods

- Previous/revised chargeable weight and class :

Commodity	Previous		Revised	
	MWC	Class	PCC	Class
Bamboo	22	145	63	LR – 4
Charcoal	34	130	63	LR – 3
Coir	12	190	63	LR – 4
Jute	30	160	63	LR – 1

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- Freight rates for different classes.

Freight rates for different classes

- Railway Board publishes a freight rate table which gives
  - class wise freight rate,
  - per tonne,
  - for different distance slabs.
- It is a historical table and has been existing since times immemorial.*
- Over the years it has undergone only minor cosmetic changes,
  - without any major changes having been attempted.
- There is a taper with increasing distance,
  - which is the same for all commodities in that class.

Freight rates for different classes

Freight/tonne for different classes and distance slabs

Distance/Class	100	120	140	160	180
201 – 210	147	176	205	235	264
301 – 310	202	243	283	324	364
401 – 410	258	309	361	412	464
801 – 825	494	593	692	790	889
1201 – 1225	719	863	1007	1151	1295
1501 – 1525	887	1064	1241	1419	1596
1801 – 1825	1033	1240	1446	1653	1859

Freight rates for different classes

- Rates for different classes are modified based on
  - whether the rate is to be increased or decreased.
- The marginal adjustments are done depending on
  - whether same has been increased or reduced in the last couple of years, and
  - our perception of what the traffic can bear.
- No exercise has been done of making an ab-initio analysis of the cost of operation and for fixing of rates accordingly.*
- In most cases it is not only difficult but impossible.*
- Cost of hauling a foodgrain rake and a cement rake is the same,
  - but they cannot be charged equally.*

Freight rates for different classes

- There are two ways of changing the freight rates.
- 1st method is to change the base freight rate of class 100 at distance slab 1 – 100 kms.
  - Thereafter base freight rate of class 100 across all distance slabs will get changed automatically,
    - as per the distance multiplication scale.
  - This is Static Rating.*
- 2nd method is change the freight rate of a particular commodity without disturbing the freight rates of other commodities.
  - This is Dynamic Rating.*

Freight rates for different classes

- Theoretically, there are two ways of changing the freight rate of any commodity.
- In case freight rate of a particular commodity is to be increased, then the same can be done
  - either by increasing the freight rate for that class,
    - in which case freight rate of all commodities in that class will be uniformly increased; or
  - alternatively, the classification of that particular commodity can be increased,
  - so that the change does not effect any other commodity.

Freight rates for different classes

- Each class has an exact relationship to base class 100.
- Hence, it is not possible to tinker with the class rate of a particular class, say class 120, without disturbing that exact relationship.
  - alternatively, the classification of that particular commodity can be increased,
- Therefore, the only way of changing the freight rate of a particular commodity is by changing its classification.*
- With reduced number of classes, even change of one step from class 100 to class 110 implies an increase of 10%, and
  - from class 190 to class 200 implies an increase of 5.26%.

Freight rates for different classes

- This is the main drawback of reduced number of classes.
- Logic given was that railways are simplifying the freight structure and it is easier for customers to understand.*
- No customer deals in fifteen different commodities.
- Neither do they deal over varying distances.
- Most of them deal with select few commodities and they are aware of the classification of their own commodities.
- Similarly, their traffic does not go all over the country to hundreds of destinations.
  - there are select few destinations to which their consignment is despatched, and
  - all customers know the freight rates to those destinations.

Freight rates for different classes

- Another reason given was that by simplifying the freight structure it will be easier for field staff to understand.*
- When a customer comes to book his consignment the CGS first checks up Goods Tariff, Part I (Vol. II), which is the book of classification in order to
  - verify the class of that commodity;
  - let us say the commodity class is 140.
- Thereafter the CGS will calculate the distance from the originating to the destination station,
  - using the through distance and
  - the junction distance tables.
- Let us say the distance comes to 763 kms.

Freight rates for different classes

- CGS will lastly open the freight rate table and check up the freight rate per tonne for class rate 140 at the distance slab of 760 – 770 kms. distance.*
- The freight rate at Class 140 for distance of 763 Kms. comes to Rs. 648.10/tonne.
- Having obtained the freight rate/tonne he finally multiplies the freight rate/tonne with the total load of the rake to arrive at the total freight.
- Let us say the total weight of the consignment comes to 2450 tonnes.
- So the total freight is worked out as
  - Rs. 648.10 x 2450 = Rs. 15,87,845/-
- This is the complete cycle.

Freight rates for different classes

- In this entire cycle the following activities are common irrespective of whatever may be the class of the commodity;
  - Goods Tariff, Part I (Vol. II).
  - Through Distance table, and
  - Junction distance table.
  - Freight rate table.*
- Even in this he has to finally consult a table,
  - Whether there are 15 columns in that table or 30 columns is immaterial.
- The CGS has to see one column and one row in that table.

Freight rates for different classes

- As far as the CGS is concerned his workload remains the same.
- With FOIS things have now become much easier.
- No CGS deals in fifteen different commodities.*
- Most of them deal with select few commodities and they are aware of the classification of their own commodities.
- Neither do they deal over varying distances.
- Traffic booked from specific goods shed does not go all over the country to hundreds of destinations.
  - there are select few destinations to which consignment from each goods shed is despatched.
- All CGSs know the freight rates to those destinations.*

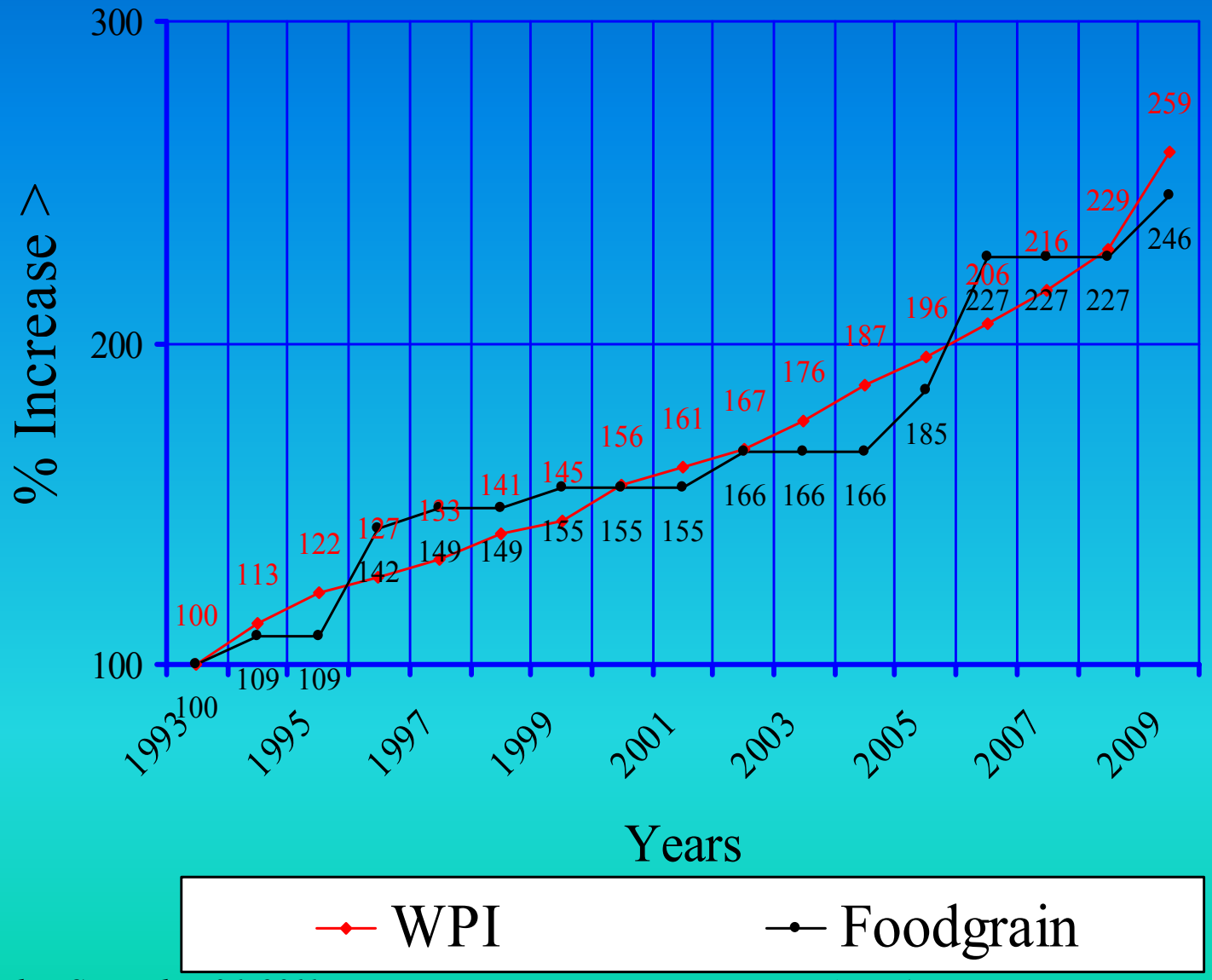
Freight rates for different classes

- By reducing the total number of different commodities, which have been classified, from 4000^{+} to 21 groups, and
  - by reducing the overall number of classes from 59 to 16;
- Railways have made it practically impossible to change the freight of an individual commodity without changing its classification.
- Perhaps the officials who undertook that exercise did not realize the implications of their action.
- Wanted to gain easy kudos.*

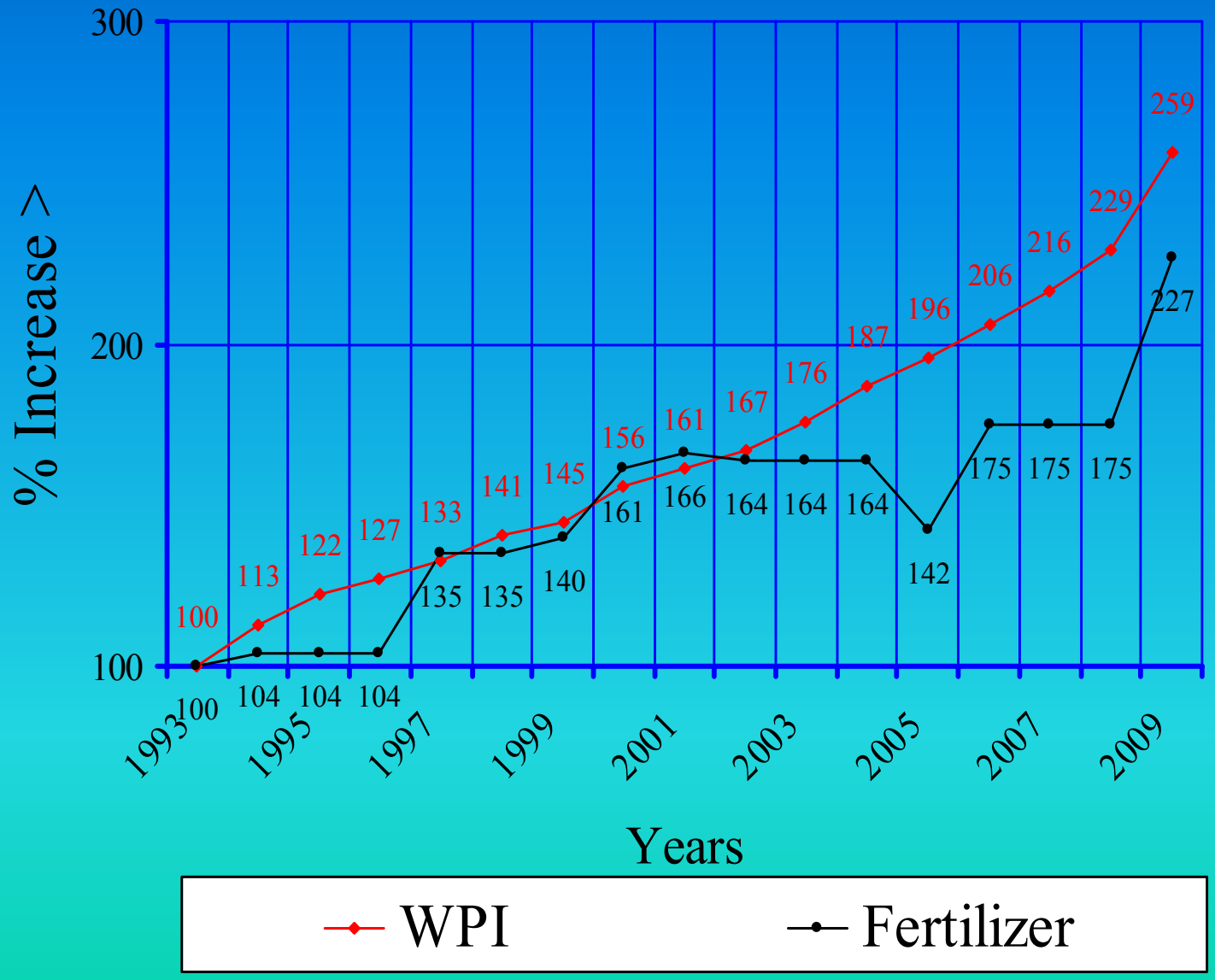
Freight rates for different classes

- Comparison with the Wholesale Price Index (WPI) which measures the annual inflation gives a good idea of the change in freight rate vis-à-vis the WPI.
- Data has been collected for displaying changes in freight rate of 7 important commodities over last 15 years.
- The commodities selected are :
  - Food Grain.
  - Fertilizer.
  - Coal.
  - HSD.
  - Cement.
  - Iron & Steel.
  - Other Goods, which is basically a mixed basket.

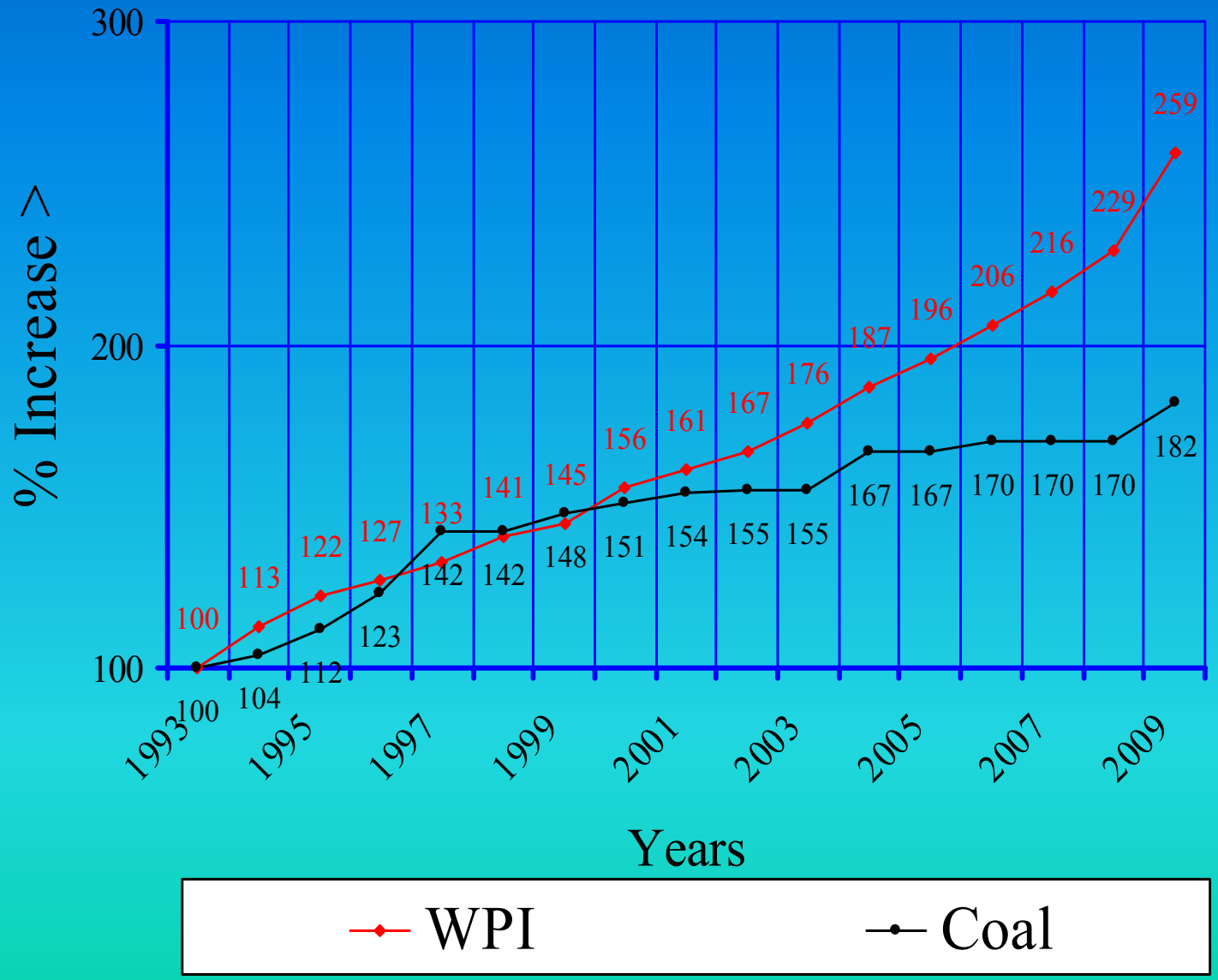
Increase in Foodgrain freight (1177 kms)



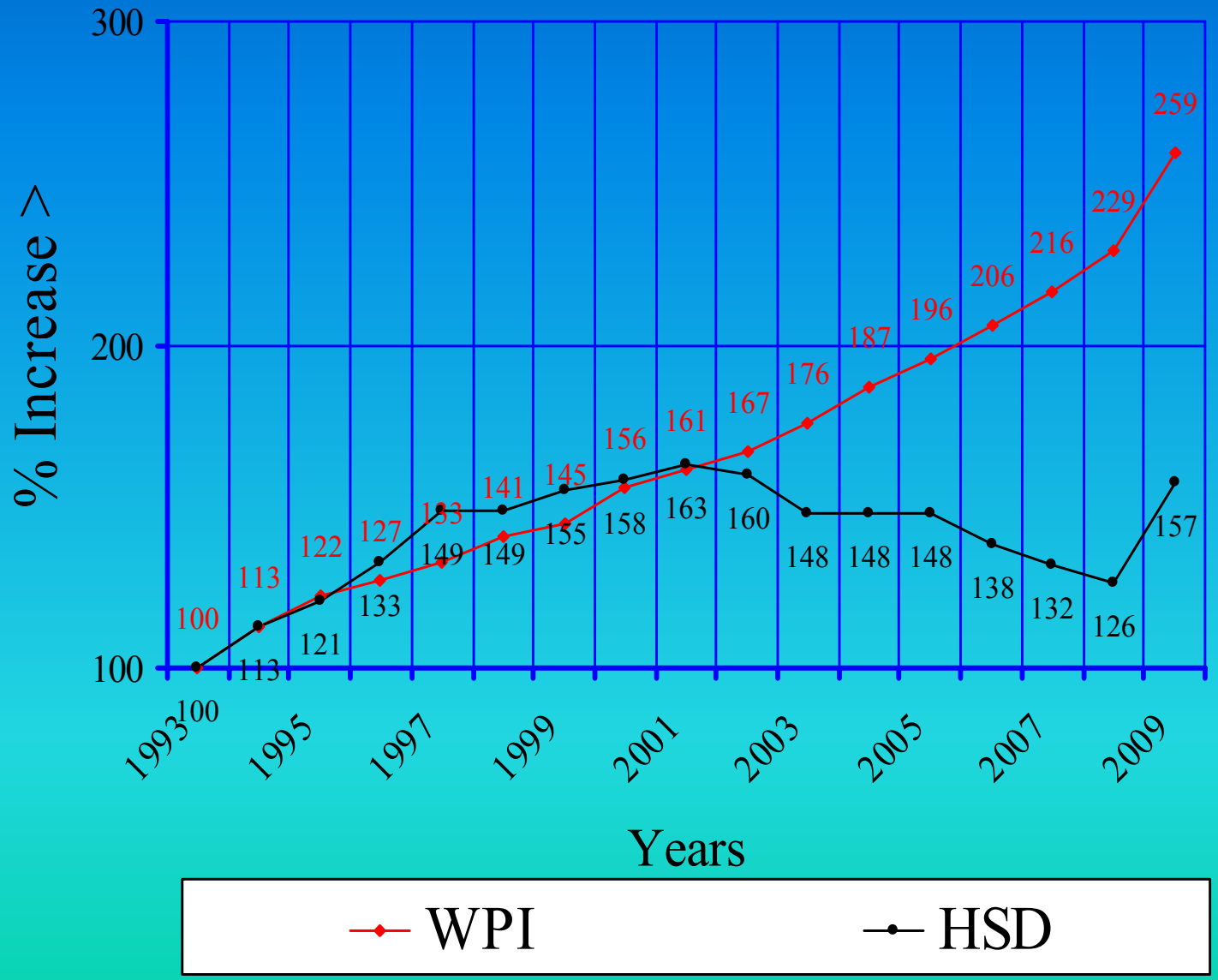
Increase in Fertilizer freight (825 kms)



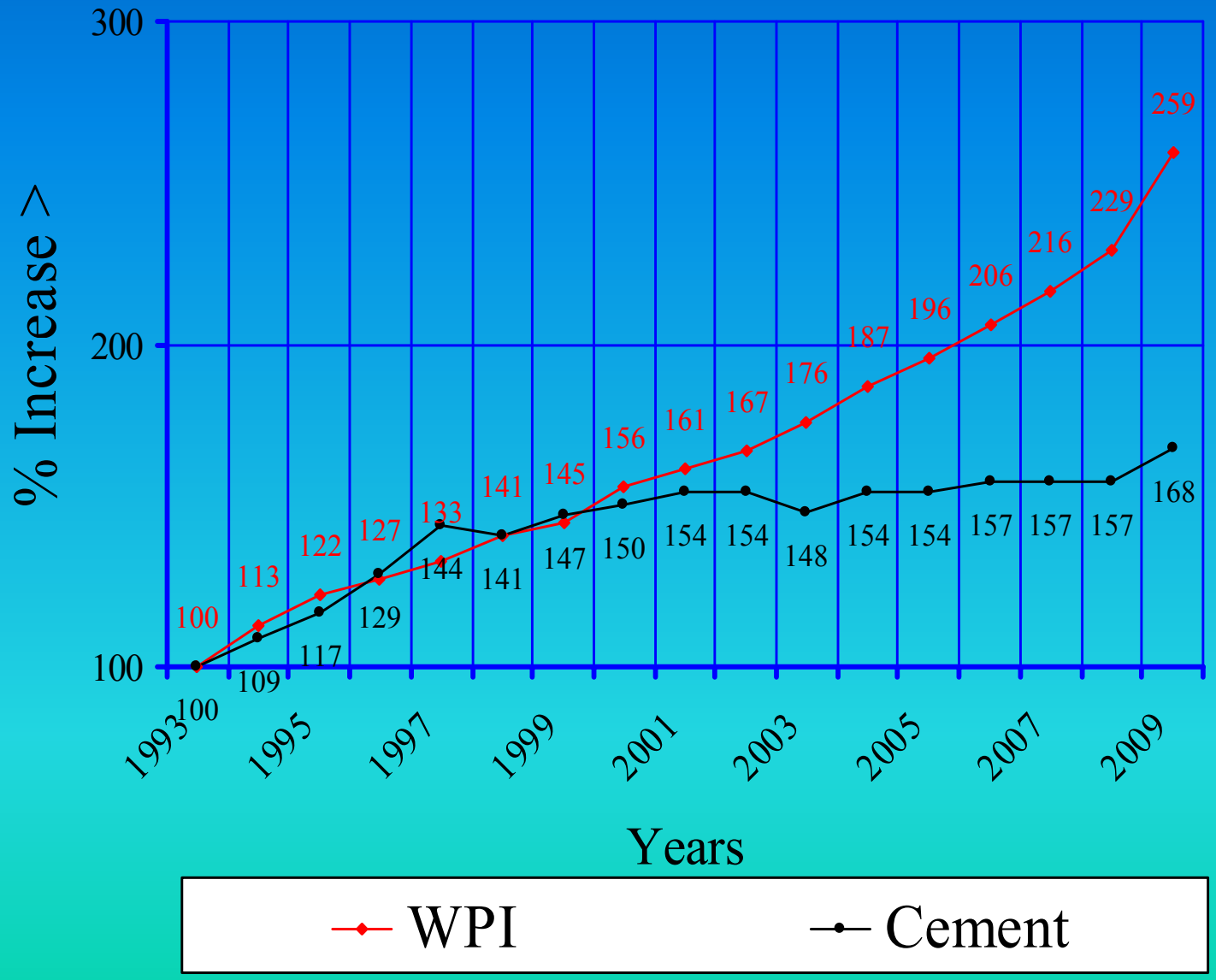
Increase in Coal freight (611 kms)



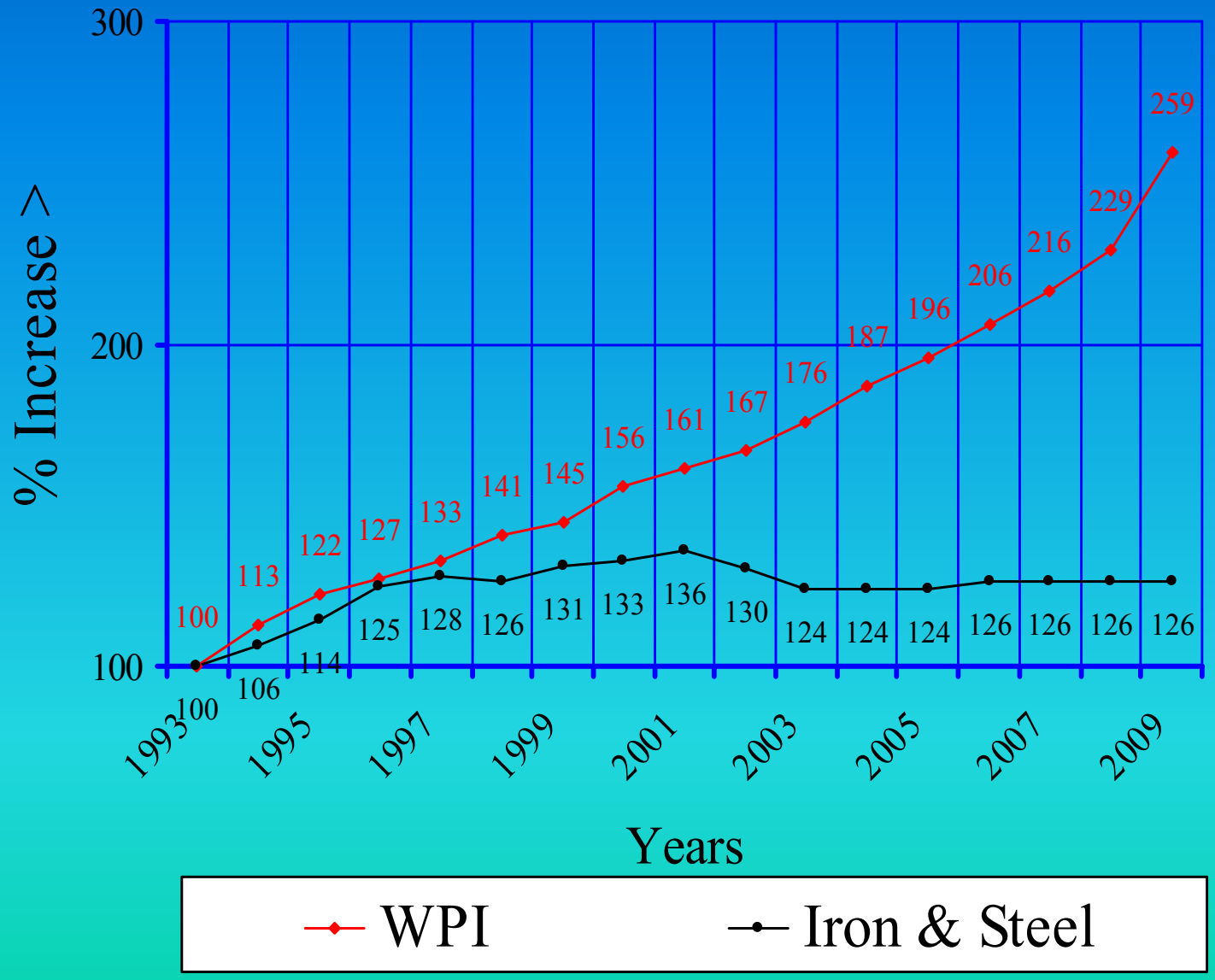
Increase in HSD Freight (640 kms)



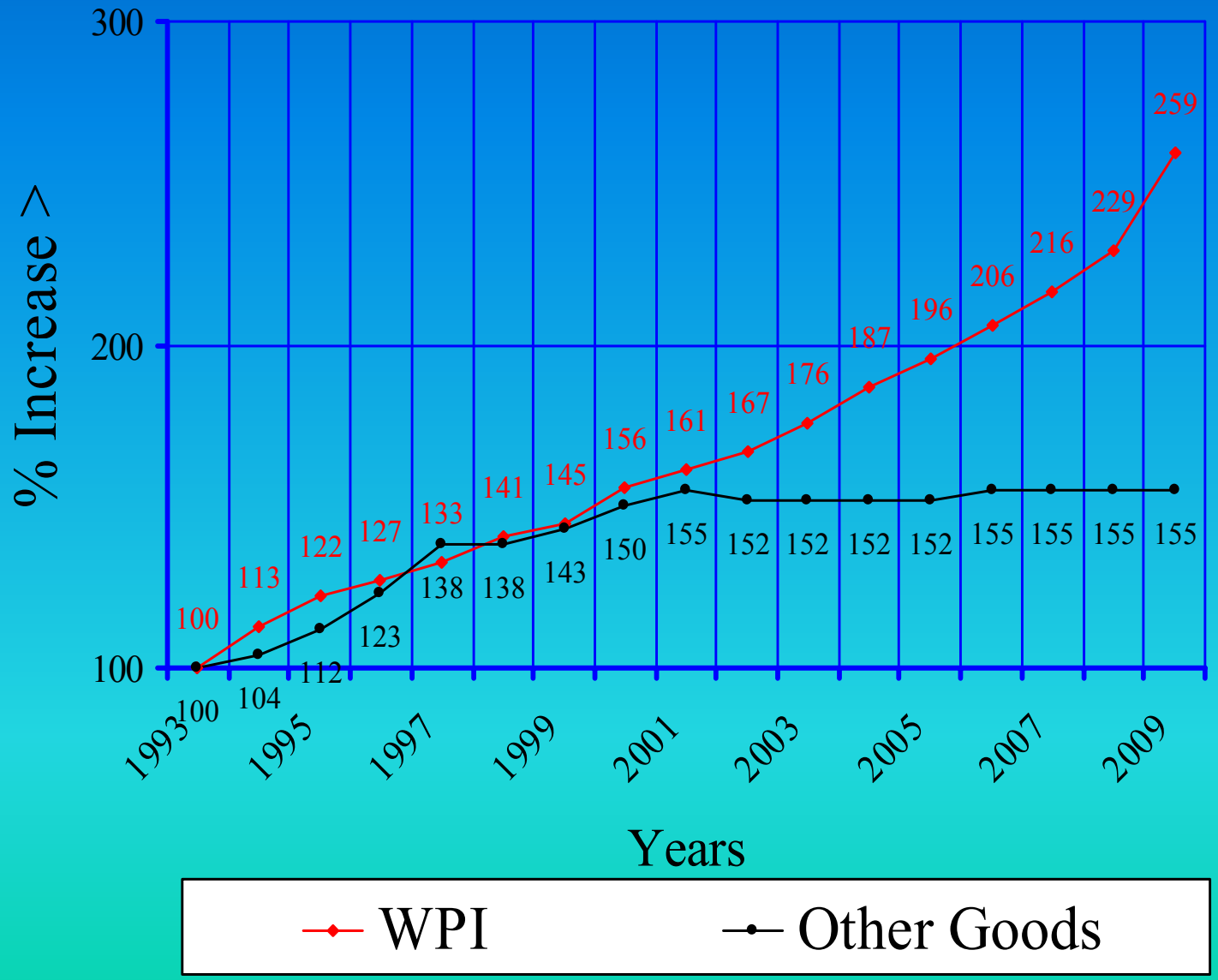
Increase in Cement freight (561 kms)



Increase in I&S Freight (1006 kms)



Increase in Other Goods (830 kms)



Outline of the Lecture

- Indian Railway Act.
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- Container Train Operators.

Container Train Operators

- In 2006 running of container trains was thrown open to private sector.
- Prospective operators were required to register themselves with IR and pay a licence fee.
- There were two categories of Licence Fees.
  - 50 Crs. for operating between NCR and JNPT.
  - 10 Crs. for other sectors.
- Licenses were granted to 14 Private Container Operators (PCOs) for running their own trains
  - by paying hauling charge to railways.
- In 2007 another 2 operators took new licenses.

Container Train Operators

- Idea was that they would contribute towards cargo aggregation, and
  - bring back part of the piece – meal traffic that was lost as a result of block rake movement.
  - Bring export traffic which in any case was being moved in containers, either by
    - CONCOR, or
    - by road.

Container Train Operators

- PCOs are prohibited from carrying certain restricted commodities,
  - such as coal,
  - petroleum products,
  - all types of ores and minerals* etc.

Container Train Operators

- Haulage charge is worked out based on a spread sheet calculation.
- The following are included in the calculation of the haulage cost.
- Basic data.
- Documentation etc.
- Line haul cost.
- Provision and maintenance cost.
- Total Direct Cost.
- Fully Distributed Cost.
- 10% for loss of path to other trains.
- Profit margin 20%.

Container Train Operators

- Basic data :
  - Type of wagon.
  - Life of wagon.
  - Number of wagons.
  - Capital cost of rake in lakhs.
  - Pay load.
  - Tare weight.
  - Lead.
  - Wagon turn round.
  - Empty return ratio.
  - NTKM.
  - GTKM.
  - No. of terminals.

Container Train Operators

- No. of marshalings.
- Train Kms.
- No. of TEU.

Container Train Operators

- Documentation Cost :
  - 12 invoices per rake.
  - Terminal cost.
  - Marshaling cost per wagon per yard.

Container Train Operators

- Documentation Cost :
  - 12 invoices per rake.
  - Terminal cost.
  - Marshaling cost per wagon per yard.
- Line Haul Cost :
  - Cost of traction per 1000 GTKM.
  - Cost of other transportation per Train Km.*
  - Cost of Signaling per Train Km.
  - Cost of Track per Train Km.
  - Total Line Haul Cost.

Container Train Operators

- Provision and Maintenance Cost :
  - Cost of repair and maintenance.
  - Interest on capital cost of wagon.
  - Depreciation element.
  - Total Provision and Maintenance Cost.

Container Train Operators

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  - Total Provision and Maintenance Cost.
- Total Direct Cost (sum of all of above)
  - General overheads.*
  - Central charges.*
  - Escalation for 2008 – 09 over 2005 – 06.
  - Fully Distributed Cost (FDC).

Container Train Operators

- Provision and Maintenance Cost :
  - Cost of repair and maintenance.
  - Interest on capital cost of wagon.
  - Depreciation element.
  - Total Provision and Maintenance Cost.
- Total Direct Cost (sum of all of above)
  - General overheads.*
  - Central charges.*
  - Escalation for 2008 – 09 over 2005 – 06.
  - Fully Distributed Cost (FDC).
- Reduced FDC for Special Wagons.

Container Train Operators

- Add 10% loss of path to trains.
- Profit Margin of 20%.
- Rate per Train Km.
- Maintenance charge at 5%.
- Rate per TEU per Km with maintenance.
- Reduced FDC per TEU. Dynamic Pricing.xls

Container Train Operators

- As per IR's agreement with PCOs,
  - They were required to develop their own terminals within 3 years.*
  - Have been permitted use of Railway Goods Sheds temporarily.
  - Group III – Handling < 7 rakes per month.
  - Group II – Handling < 12 rakes per month.
  - Group I – Handling > 12 rakes per month.
- Terminal Access Charge of Rs. 34,000/- per terminal per loading/unloading of each rake.*
- Being extended on a year to year basis.*
- Problems of stabling.*

Container Train Operators

- They could be permitted Hub and Spoke system of operation on case to case basis.*
- Basically for the purpose of cargo aggregation.*
  - Commitment regarding increase in volumes.
  - Benefit of Telescopic Rate.
- Rating of Container Trains transferred to Rates branch from Traffic Transportation Directorate.
- Application from one particular CTO.
- Running of Exim traffic although they had taken licence for domestic sector only.

Container Train Operators

- CTOs is a powerful lobby.
- Market is not big enough for 16 players.
- Recession has exposed their soft underbelly.
- 10% increase in haulage charges for domestic cargo had to be rolled back.
- Subsequently, from July 2009, this 10% increase was finally implemented.
- Roll back was also demanded for 10% increase in haulage charges for exim traffic.*
- Don't want to do hard field work.*

Container Train Operators

- Moving steel traffic from steel plants.*
- Wanting to move cement in loose in bulk.*
- Requirement of smaller transportation packets from the customers point of view.
- Reduced inventory cost.
- Haulage charge for container traffic is much less than our class rate for the same type of traffic.
- Haulage charge for loaded containers is equivalent to class rate of around 90.*
- Haulage charge for empty containers is equivalent to class rate of around 65.*
- Rating of traffic moving in containers.

Container Train Operators

- Loss of revenue.
- Loss of line capacity.*
- Full freight to be charged as per the class of traffic moved – cement (class 150), steel (class 180) etc.
- 10% rebate for wagon ownership.*
- Profit margin of CTOs.
- For mini rakes and two point rakes of IR wagons,
  – surcharge of 5% is being charged in busy season.
- This will not be charged in case of container trains.
- Extra charge for door to door value added service.
- Their profit margin can out of this and also by diverting smaller transportation packets from road to containers.*

Container Train Operators

- Loss of line capacity will get compensated by loaded movement of container trains in both directions.
- Additional traffic can get generated for medium distance bulk traffic which is being road bridged at one end.*
- Will be permitted on case to case basis.
- This will not be permitted from siding to siding.
- Only from Siding to goods sheds.

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Private Train Operators

- Ever since the container sector was opened up for private container train operators,
  - there have been persistent demand for opening up the sector for private train operators for other types of wagons.
- Private operators will own and maintain their wagons,
  - IR should merely charge haulage cost.
- Their profit margins will have to come out of IR's profit margins,
  - our bottom line will reduce.
- We cannot afford to let go of our bulk traffic which is our main bread and butter
- What is your view?

Private Train Operators

- IR has been having different types of privately owned wagons for years.
  - BTAP wagons for transporting Alumina.
  - BTCS wagons for transporting Caustic Soda.
  - Special wagons for transporting cement in loose in bulk.
- Permitted for end users only.
- In all the above cases rebates were worked out on a case to case basis,
  - without taking into consideration empty haulage.
- Recent addition of Special Type of wagon for transporting Foodgrain in bulk in loose.*
- 3rd Party ownership.*

Private Train Operators

- Disadvantages,
  - Reduced profitability,
  - Loss of line capacity,
  - Empty return ratio remains pegged at 100%.
- Advantages of Privately Owned Wagons,
  - no investment by railways,
  - diversion of traffic from road to rail,
  - committed traffic for next 35 years.*
  - New technology for wagon design.*

Private Train Operators

- These Special Purpose Privately Owned Train (SPPOT) is meant for transporting commodities which are either moving in low volumes by railways or not moving at all.
- Category – I (Light weight category)
  - Automobiles.
- Category – II (Low volumes)
  - Fly Ash.
  - Chemicals.
  - Petrochemicals such as Carbon Black.*
  - Molasses.*
  - Caustic Soda.
  - Vegetable Oil.*

Private Train Operators

- Category – III (Break bulk in loose)
  - Cement in loose in bulk.
  - Fertilizer in loose in bulk.
- We want to go a bit slow on this category – III.
  - To begin with it should be permitted only to end users and not to 3rd parties.
- At a later stage based on our experience opening up of this particular stream to 3rd parties can be decided.

Private Train Operators

- Granting of licence to an operator does not mean that IR will not move that traffic on their own.
- PCOs and CONCOR.
- SPPOT will operate between private terminals.
- SPOTTO must have tie up with private terminal/siding for handling such trains.
- Maintenance of wagons may be undertaken by IR on payment, or
- Privately maintained as per extent policy.

Private Train Operators

- Most important question of freight rebate.
- In class 100, 35% of empty haulage is already built in the freight rates.
- Category – I
  - Loaded movement in both directions.
  - Loaded freight at 55% of class 100.
  - Empty freight at 35% of class 100.
  - For 60 tonne weight per wagon.*
- Railways generate additional traffic.
- Adequate profitability is ensured to SPPOTO.

Private Train Operators

- Category – II.
  - Generally empty haulage is 100% even in railway owned wagons.*
- Full freight at public tariff will be charged with permissible rebate for loaded movement.
- Empty movement of > 100% will be charged for empty haulage at 50% of class 100.
- Rebate :
  - 15% rebate for wagon ownership, as against 10% for IR.
- For every 2% increase in throughput beyond 5% increase, additional 1% rebate will be granted.
  - Subject to total rebate not exceeding 20%.*

Private Train Operators

- Category – III.
  - For cement wagons cement and fly ash can be moved in two legs of the same rake,
  - thereby generating high volumes and huge rebate.*
- For these wagons also, extra rebate will be given for inducting new technology of wagon design.
- Every 2% increase in throughput beyond 5% increase, additional 1% rebate will be granted.
  - Subject to total rebate not exceeding 20%.*

Private Train Operators

- Commodities moving in volumes less than 1MT.
- Maximum would be 20MT for all such commodities combined.
- If this traffic can go up to 100MT, IR gains, SPPOTO gains.
- New design of wagon will ensure reduction in unit cost of transportation.

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- Passenger fares for different classes.

Passenger Fares for different classes

- Passenger fares are decided more or less on the basis of political compulsions rather than for administrative reasons.
- While some of the upper class services are priced on the higher side,
  - our sleeper class fares, and
  - general second class fares are under priced.
- IR's Monthly Season Tickets (MSTs) and Quarterly Season Tickets (QSTs) for suburban services are probably the cheapest in the world.

Passenger Fares for different classes

- In case of most commuters using IR's suburban services, the cost of their MSTs/QSTs are being reimbursed by the organizations where they work.*
- Today a passenger spends more in traveling by Auto from a suburb of Delhi to the New Delhi railway station,
  - than what he spends on his sleeper class ticket from New Delhi to Lucknow.
  - Despite knowing all this we are not willing to increase passenger fares.
- While some marginal increases have taken place by way of reservation charges, Tatkal Seva etc.,
  - across the board revision of fares has not taken place for quite some time.

Passenger Fares for different classes

- Suffers from absence of co–relation between tariff and input cost.
- Upper Classes rendered uncompetitive by repeated price hikes in the past.*
- Inadequate appreciation of what ‘customer can pay’.*
- No formalized mechanism to identify customer needs and perceptions.*
- Consequent unfettered expenditure on ‘passenger amenities’ with loosely defined standards.
- Losses on passenger services are not transparent.*
- Suburban services and MSTs highly subsidized.

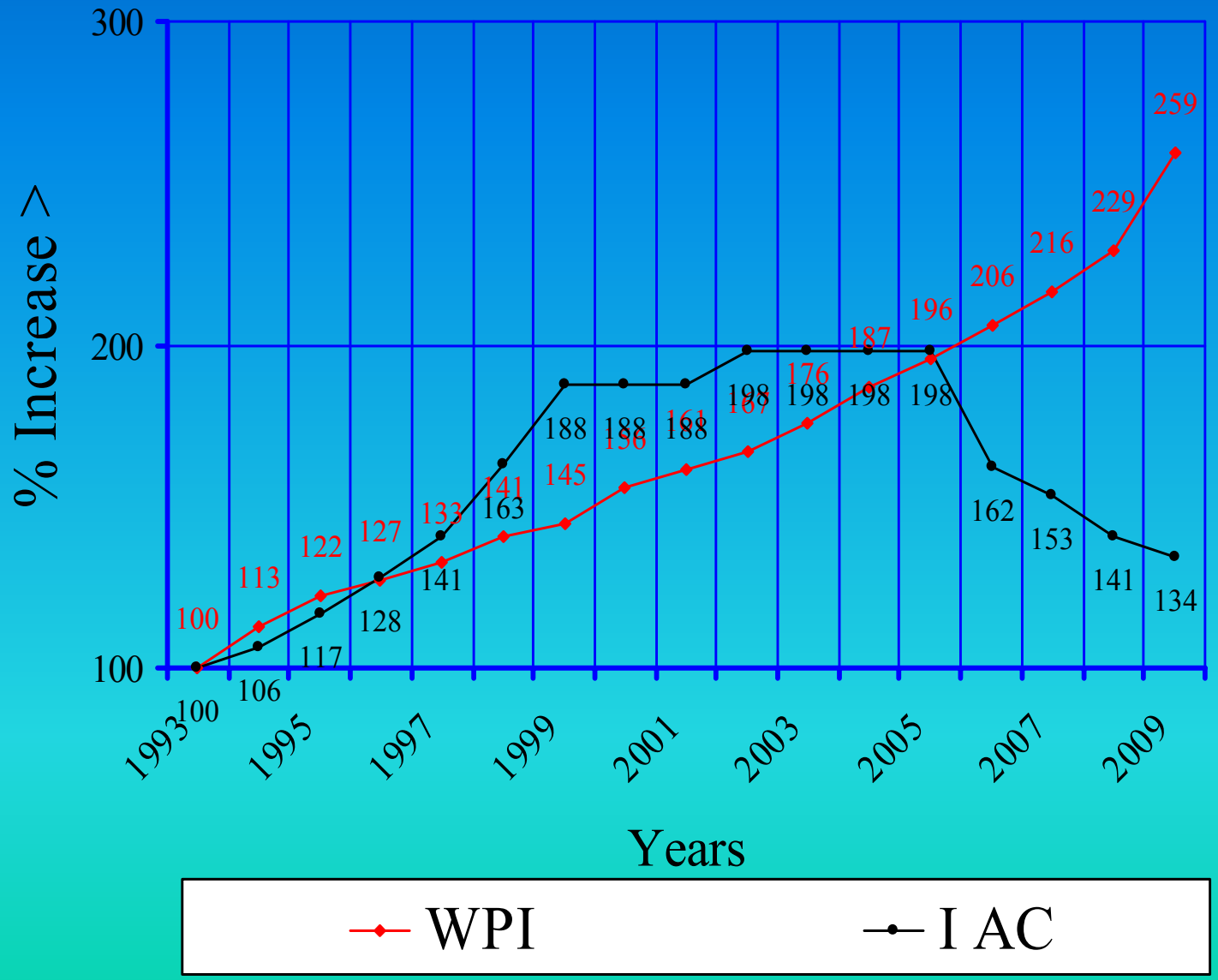
Passenger Fares for different classes

- Spread between the highest and the lowest fares needs to be reduced.
- Suburban fares should be indexed to input costs.
- MST fares should be increased from 15 journeys to 25 in steps of 2 journeys per year.
- Second Class Mail/Express fares to be increased @ 5% per year to eliminate losses.
- No subsidy to Second Class Ordinary Fare.
- Suburban subsidy to be limited to MSTs only by way of percentage discount of fare derived from Second Class Ordinary fares.
- Variable pricing to be introduced for revenue generation from popular trains.*

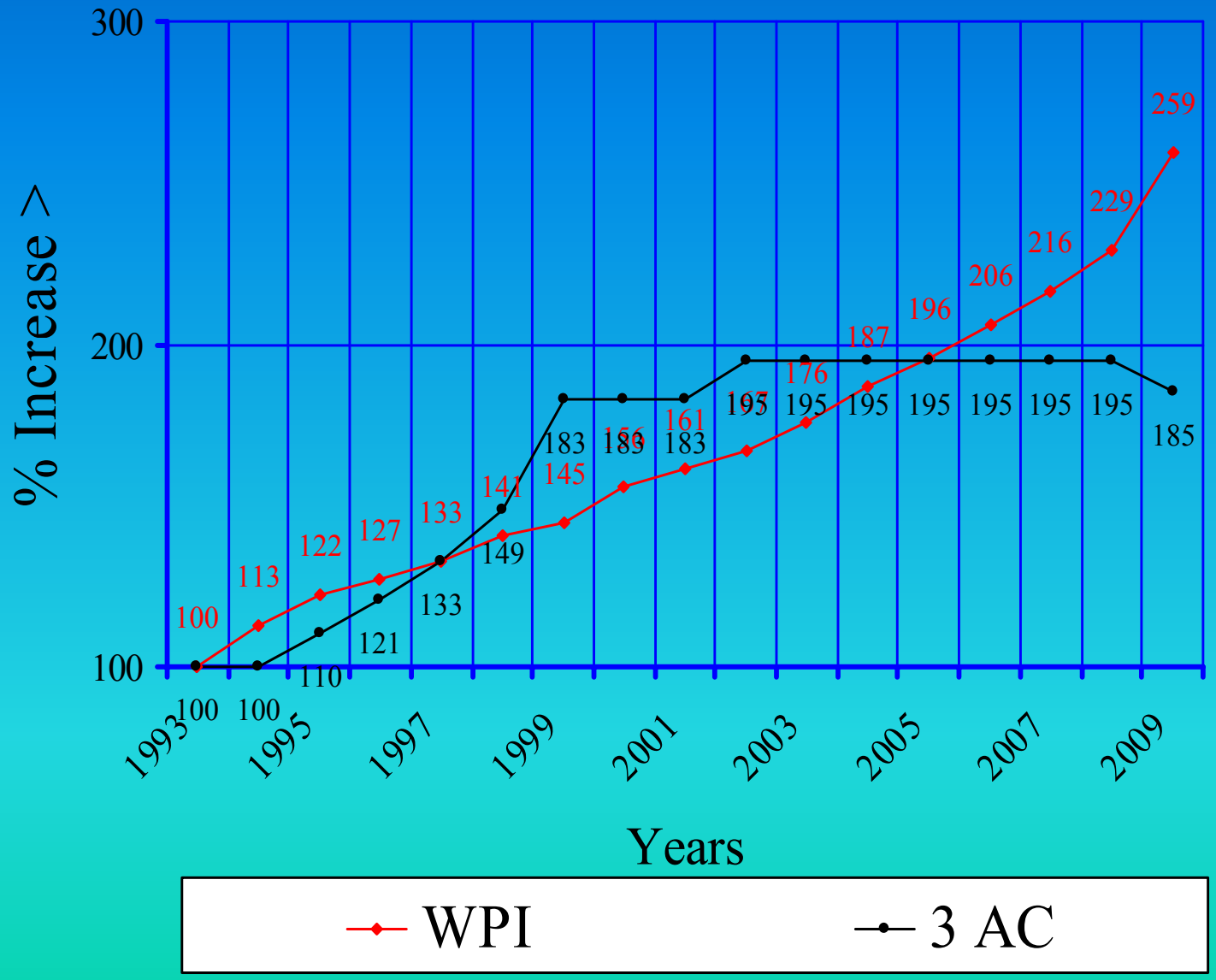
Passenger Fares for different classes

- Non suburban business must be self sustaining.
- Fares for Second Class Ordinary and Sleeper Class need to be indexed to input costs to eliminate losses.
- Suburban business may continue to need partial and controlled subsidization.
- Subsidy to suburban business must be capped in financial terms for transparency.
- Suburban fares should be indexed to fuel costs.*
- Products and prices need to focus sharply on the target segment.

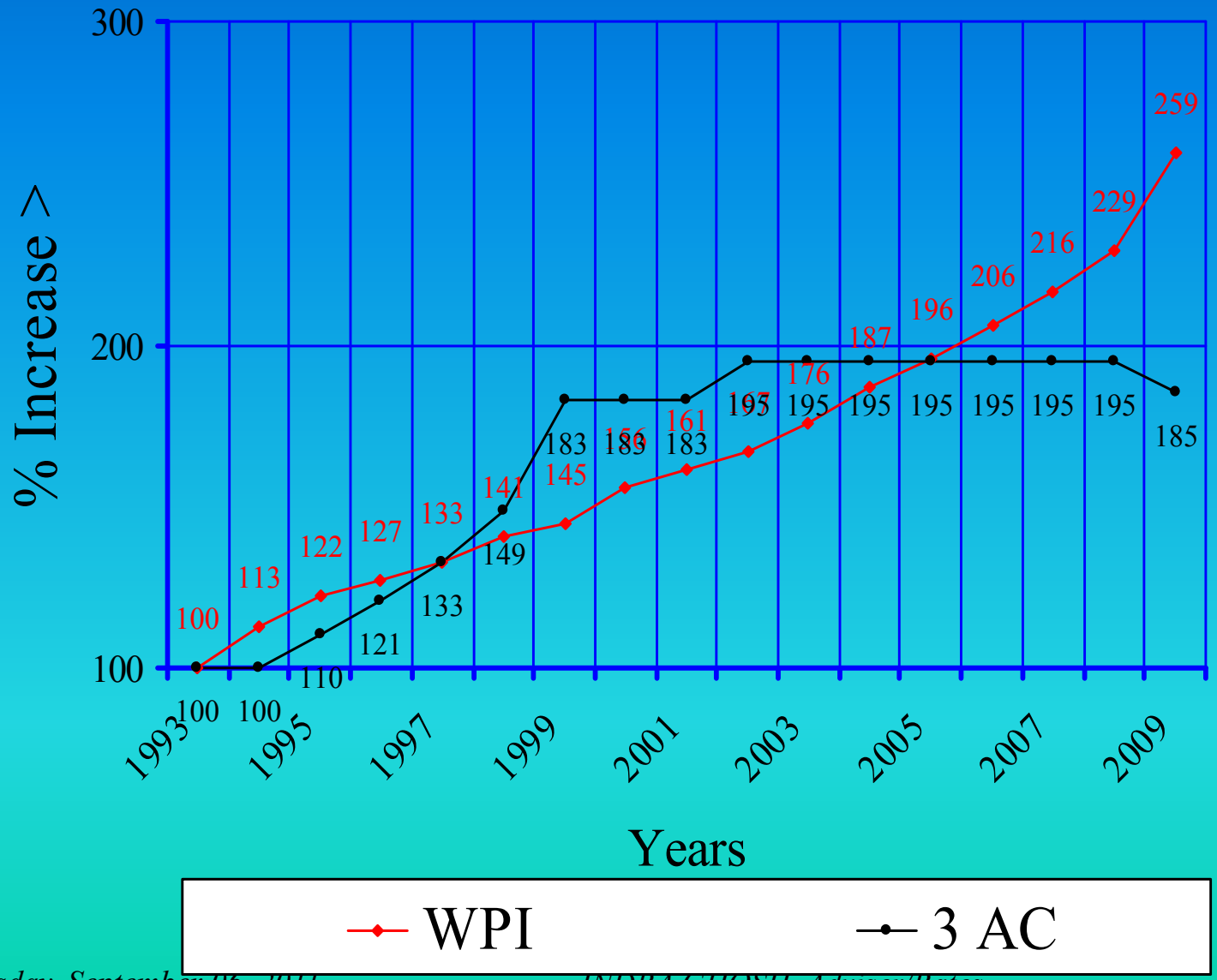
Increase in I AC fares (893 kms)



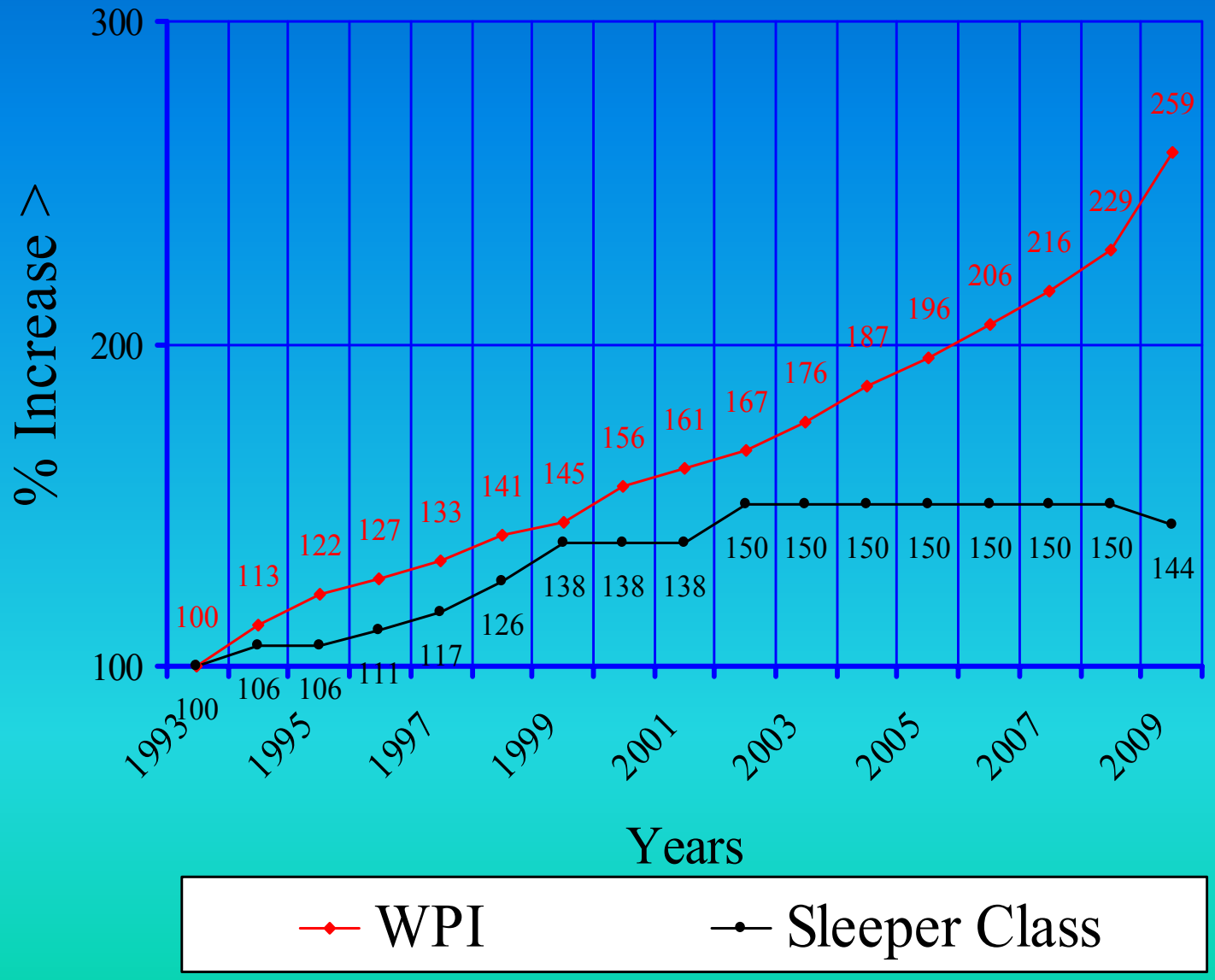
Increase in 2 AC fares (781 kms)



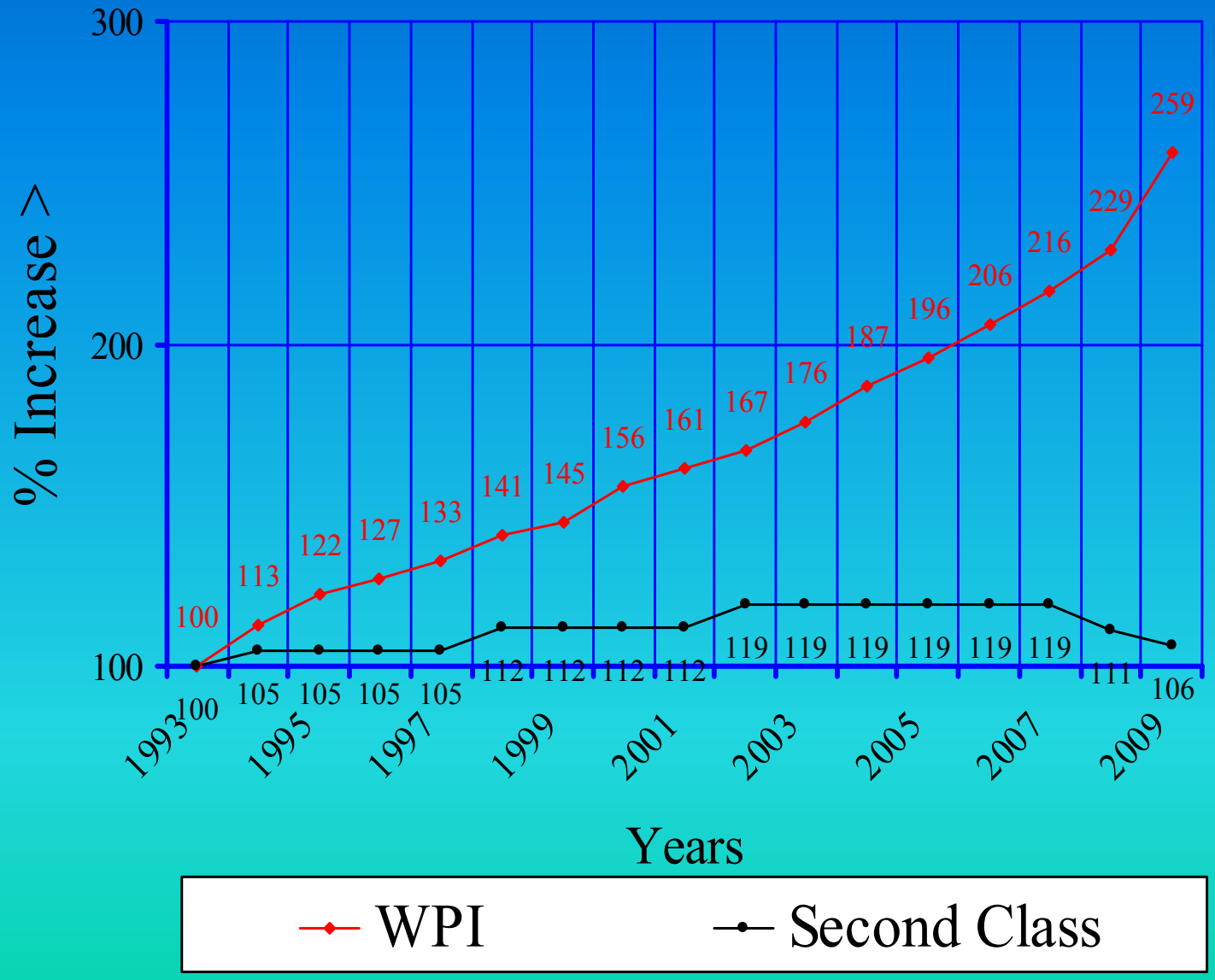
Increase in 3 AC fares (858 kms)



Increase in Sleeper class fares (751 kms)



Increase in Second class fares (349 kms)



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Costing & Pricing Issues

Any questions please ?



Thank You



COSTING

&

PRICING ISSUES

IN

TRANSPORT SECTOR

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