



Control of Pollution (Water)

Officers of CP Division

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- Dr. Rashid Hassan, Adviser
- Dr. Manoranjan Hota, Adviser
- Mr. Sarath Palleria, Director
- Dr. Harendra Kharkwal, Joint Director
- Mr. N. Siddique, Deputy Secretary
- Mr. Dinesh Runiwal, Joint Director
- Dr. Rubab Jaffar, Deputy Director
- Mr. J P Meena, Under Secretary
- Mr. R N Pankaj, Deputy Director
- Ms. Piyali Bandyopadhyay, Project Scientist

Broad areas....

- Industrial pollution
- Classification of Industries
- Comprehensive Environmental Pollution Index (CEPI)
- Common Effluent Treatment Plants
- Environmental Laboratories
- Environmental Health



Industrial Pollution

- **17 Category Highly Polluting Industries:**
 - Include Aluminum smelting, Basic Drugs & Pharmaceuticals Manufacturing, Caustic Soda, Cement (200 TPD and above), Copper Smelting, Dyes & Dye Intermediate, Distillery, Fertilizer, Integrated Iron & Steel including Sponge Iron, Leather Processing including Tanneries, Oil Refinery, Pesticide Formulation & manufacturing, Pulp & Paper (30 TPD and above), Petrochemical, Sugar, Thermal Power and Zinc Smelting
- **Grossly Polluting Industries (GPIs):**
 - Industry discharging pollution load of **BOD 100kg** per day and/or handling hazardous chemicals as specified in manufacturing, Import, Storage of Hazardous Chemical Rules, 1989 and as amended.

On-line Monitoring

- MoEF&CC emphasised on adoption of technologically advanced method of 24x7 online compliance monitoring.
- CPCB issued directions to **17** Category Highly Polluting Industries, CBWTFs, CHWTSDFs, Common HW Incinerators for installation of online monitoring devices for effluent and emission monitoring.
- Nearly **1778** industries have installed 24x7 monitoring devices and **630** are under installation.
- Out of **764** GPIs in five Ganga-basin States, **553** industries installed on-line monitoring devices ; under installation – **48**; Deferred - **29** (being Dry process/ No effluent / ZLD based); Closed – **134**

Re-classification of Industries

- Classification linked to
 - Categorisation of industries, consent management & vigilance.
 - Size, manpower & consumption of resources
- **Red category:** Pollution Index score: 60 and above
- **Orange category:** Pollution Index of 41 to 59
- **Green category:** Pollution Index of 21 to 40
- **White category:** Pollution Index of up to 20

Re-classification of Industries

- 26 industries from **RED** category have been re-categorised to “**ORANGE**”
- 03 industries from **RED** category have been re-categorised to “**GREEN**”
- 19 industries from **ORANGE** category have been re-categorised to “**GREEN**”
- 02 industries from **ORANGE** category have been re-categorised to “**WHITE**”
- 06 industries from **GREEN** category have been re-categorised to “**ORANGE**”
- 34 industries from **GREEN** category have been re-categorised to “**WHITE**”

Start-ups: MoEFCC's contribution

- MoEFCC made efforts under 'Make in India - Ease of Doing Business' initiative MoEF&CC has taken **steps for regulatory compliance of Start-ups and introduction of self-certification of compliance** in respect of environmental laws

Applicability of Start-ups

- Applicable to Start-ups falling within definition of Start-ups of DIPP, provided that the Start-ups fall in 'White Category' of industries (least polluting or not polluting) as per classification of CPCB and locate their establishment in conformity with the approved land-use.
- CPCB has already issued directions on 07.03.2016 to all SPCBs / PCCs to give effect to self-certification.

Comprehensive Environmental Pollution Index (CEPI)

- CEPI is a rational number between 0 and 100 assigned to a given location.
- Environmental quality characterized by **source => pathway => receptor**.
- CPCB made study in with IITs (Delhi, Kanpur, Kharagpur, Roorkee) in 2009 in 88 prominent industrial clusters in the country.
- **43 Critically Polluted Areas (CPAs)** were identified with CEPI score of 70 and above.

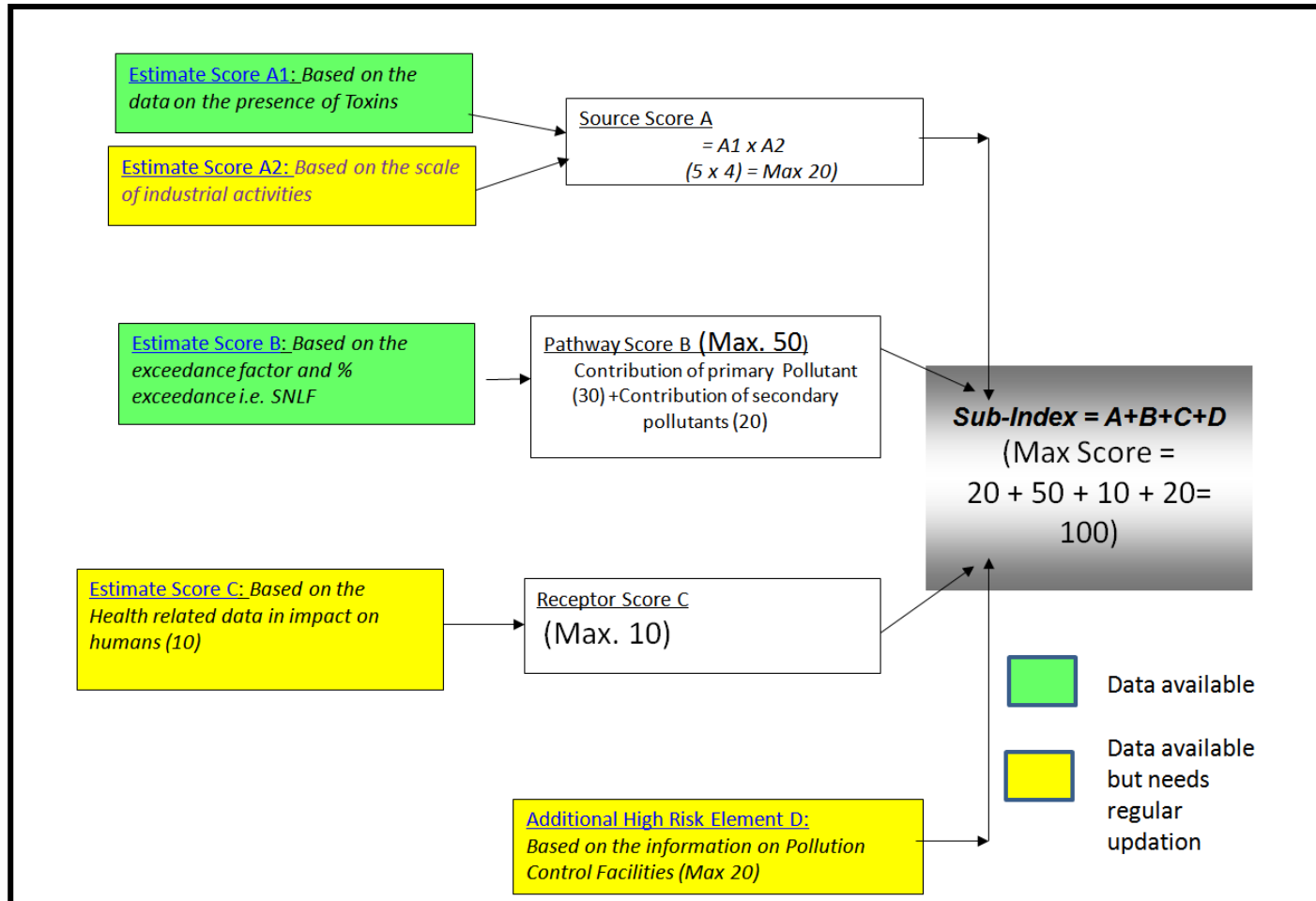
Imposition/Lifting of Moratorium

- Moratorium imposed on new industrial projects / expansion of existing projects by MoEF&CC in Jan,2010 (CPCB & IIT).
- Moratorium lifted progressively from October, 2010 from 26 CPAs (Action plans formulated by SPCBs/ PCCs).
- Moratorium lifted from 10 CPAs and re-imposed in 8 CPAs in September, 2013. (Based on 2011 & 2013 assessment)
- Re-imposition was kept in abeyance in July, 2014.
- **Presently, 6 CPAs are under moratorium.**
- 8 CPAs were under re-imposition of moratorium and are kept in abeyance.
- Moratorium lifted from 28 CPAs .

Revised CEPI

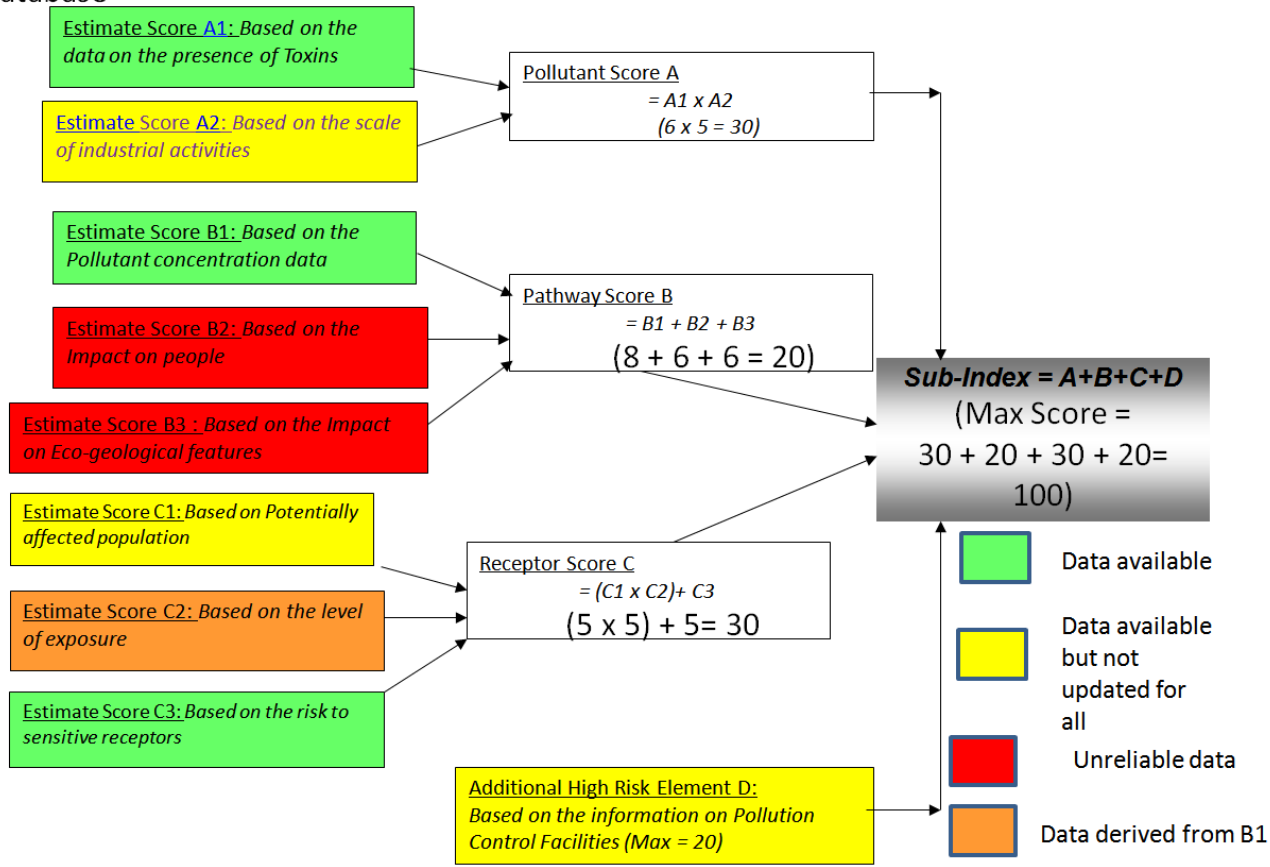
- Revised CEPI concept
 - Eliminating the subjective factors, but retaining the factors which can be measured precisely.
- Criteria of revised CEPI are based on following:
 - Eliminating the subjectivity but retaining the factors which can be measured precisely.
 - Retaining the existing algorithm of Source, Pathway and Receptor.
 - Retaining Health component.

Revised Comprehensive Environmental Pollution Index (CEPI)



Old CEPI

The Existing formula for CEPI calculation being data-centric needs intensive/reliable database



Common Effluent Treatment Plants (CETP)

- MoEFCC started the CETP scheme in 1991
- 119 CETPs set up so far (91-WB + 28 -MoEFCC= 119)
- **Financing Pattern :**
 - Central Govt. subsidy (50%)
 - State Govt. subsidy (25 %)
 - Proponent's contribution (25%)
- Central assistance – only for capital costs
- Recurring and O&M costs – to be met by CETP
- **BE: 2016-17: Rs10cr.**

Assistance for Abatement of Pollution

- **Beneficiaries:** Weaker State Pollution Control Boards/Pollution Control Committees (< Rs 5 Cr of Cess collection)
- **Assistance for:**
 - Laboratory up-gradation/procurement of equipments.
 - Salary support to scientific/technical staff of SPCBs of North-East and all PCCs.
 - Construction of Office-cum-Laboratory building.
- **2016-17:** BE: Rs. 7.00 Crore

Water (Prevention and Control of Pollution) Cess Act, 1977

- Of the total Cess collected by SPCB/PCC:
 - 80% is State share reimbursed to them
 - 20% Central share is utilised for R&D, pollution control activities

River Ganga related Matter

- Hon'ble NGT constituted 3 committees on 17.11.2014 in the matter of O.A. No.196/2014

– **Principal Committee** headed by Secretary, EF&CC with mandates:

- Policy decisions & Action Plans/Report Preparation for pollution control of River Ganga,
 - To have overall control over the State Level Committees and Implementation committees, and
 - To submit monthly reports to Tribunal
- As on date, 2 meetings have been held.
- 3 Compliance Reports and 2 Supplementary Reports to 3rd Compliance Report submitted to NGT.

River Ganga related Matter

- MoEF&CC represents in following Committees:
 - **Principal Committee** under chairmanship of Secretary, MoWR, RD&GR in matter of O.A.200/2014
 - **High Level Task Force** (HLTF) under Chairmanship of Cabinet Secretary on River Ganga related matters
 - **National Water Mission** (NWM) under Chairmanship of Secretary, MoWR, RD&GR as per National Action Plan on Climate Change
 - **Empowered Steering Committee** of National Ganga River Basin Authority (NGRBA) under Chairmanship of Secretary, MoWR, RD&GR
 - **Inter-Ministerial sub-group** on Wastewater Dimensions, constituted in follow-up as per the 2nd Meeting of NWM.

Recognition of Environmental Labs

- Environmental Labs are recognised under Section 12 Environment (Protection) Act, 1986.
- Environmental laboratory assesses status of environment from:
 - environmental media (air, water, soil, biota); and
 - sources of disposal e.g. industries, domestic & agril sources, automobiles etc.
- Environmental labs are required to have following:
 - Water Analysis Section; Air Analysis Section
 - Soil and Solid Waste (including hazardous wastes) Analysis
 - Instrumentation Section (Analysis requiring sophisticated instruments)
- 75 Laboratories have so far been recognised and other applications are under process

Environmental Health

- **Health** is “A state of complete physical, mental and social well being and not merely the absence of disease or infirmity”
- **Environmental Health** includes quality of life that are affected by Industrial, Vehicular, Surface & Ground water pollution; Soil contamination, etc.--- Study initiated
- **Committees for EH**
 - **Apex Committee** under the Chairmanship of Secretary, MoEFCC
 - **Working Group** under joint Chairmanship of MoEFCC and ICMR

SWOT analysis- Pollution Control

Strength	Weakness	Opportunity	Threat
<ul style="list-style-type: none"> • Well defined regulations e.g. Water Act , Air Act, E(P)Act; etc • Good coordination and liaison with CPCB, SPCBs & other Instn. • Communication, skill, & experience • Concessions/subsidy/ Custom duty exemptions on technology • Social awareness 	<ul style="list-style-type: none"> • Poor compliance to regulation/ standards • Poor implementation of projects/programmes • Limited trained human resources • Poor access to technology • Lack of finance resources • Poor infrastructure (gradually improving) • Poor operational efficiency of industries • Unwilling to invest in technology • Requires more focus on cumulative effect on environment rather than point source 	<ul style="list-style-type: none"> • Adoption of self regulation by industries • Empowerment of CPCB and SPCBs Change in technology • Tighter emission standards • Establishment of ETPs and CETPs • Availability and adoption of Good practices • Change in policies • Change in social attitude/Life style changes • Growing support of NGOs • Enhanced awareness 	<ul style="list-style-type: none"> • Poor management in some industrial sectors • Poor regulatory compliance by SSIs • Challenges to stricter norms • Disposal of industrial waste: major issue • Impact on health • Adherence to Global Quality /certification of technology • Increased legal issues including PIL

Way forward.....

- Improve
 - Compliances
 - monitoring
 - Mitigation measures
 - Institutional measures
 - Polluters Pay Principle
 - Accurate base line data
- Increasing understanding of cause-effect relationship
- Focus on SSIs
- Cumulative pollution and impact assessment
- Capacity building of stakeholders

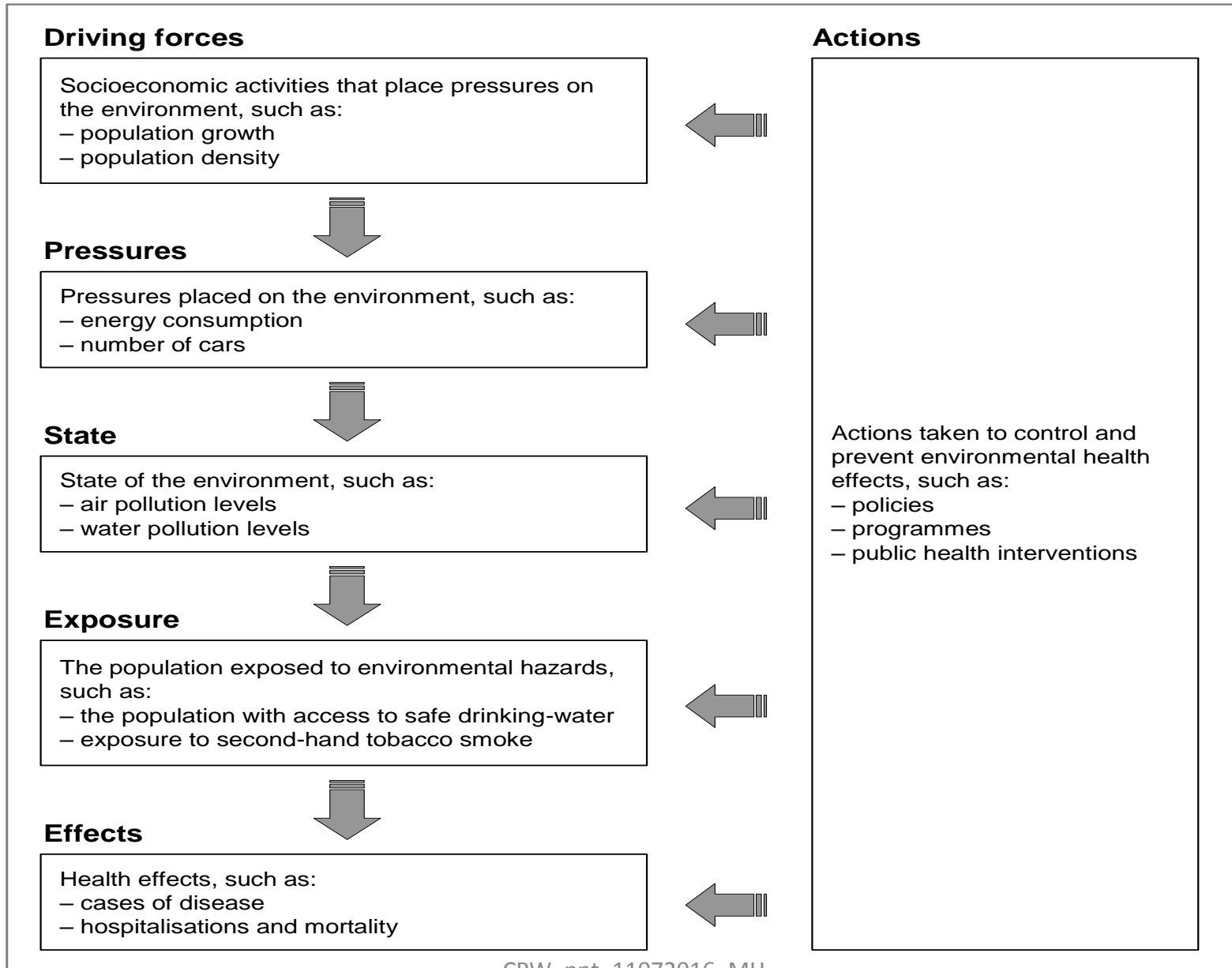
Thank you

Every problem has two solutions ...

1. भाग लो (Run Away)
2. भाग लो (Participate)

Thank you

DPSEEA framework



Recognition of Environmental Lab

STATE-WISE STATUS OF ENVIRONMENTAL LABORATORIES (PRIVATE) UNDER SECTION 12(1) B OF ENVIRONMENT (PROTECTION) Act, 1986 TILL JANUARY 2016.

S.No.	State	Laboratories (Private) Notified by Ministry	Laboratories (Private) pending Notification	Laboratories (Private) for Pending for recognition	Total
1.	Andhra Pradesh	10	03	03	16
2.	Bihar	01	-	-	01
3.	Daman	01	-	01	01
4.	Delhi	07	01	03	11
5.	Goa	02	-	-	02
6.	Gujarat	07	02	04	12
7.	Haryana	04	03	01	08
8.	Himachal Pradesh	-	01	-	01
9.	Karnataka	04	02	06	12
10.	Kerala	01	-	-	01
11.	Madhya Pradesh	01	-	02	03
12.	Maharashtra	13	05	06	24
13.	Odisha	02	02	-	04
14.	Punjab	02	01	01	04
15.	Rajasthan	01	02	02	05
16.	Tamil Nadu	08	02	03	13
17.	Uttar Pradesh	08	02	07	17
18.	West Bengal	03	01	01	04
	Total	75	27	40	142