

**Presentation**  
**for**  
**Review of Department of**  
**Environment, Forest and DPCC**

**by**  
**Secretary (E & F) – cum- Chairman, DPCC**

# I. Department of Environment

## Main issues

### 1. Eco Club schools :

- Started in 1998 with 100 schools
- In 2008, participation of 2000 active eco club schools has set a record in the whole country.
  - 1900 Schools & 100 Colleges
  - 93 lead eco-club schools
  - 15-20 schools connected with each lead school.
- By 2009, all middle schools and above will be covered, adding another 500 odd, making a total of 2500.
- Eco-club school teachers act as master trainers for new schools added every year.
- With annual grants of Rs. 10000 – 12500 /-, each eco club schools propagates environmental issues like Solar Water heating, Rain water harvesting, plantation, waste management, herbal garden, mushroom cultivation using waste

- Annual Eco-meet held very successfully from 14-17 December 2008 at Pragati Maidan, Hall No. 3. Hon'ble CM inaugurated the exhibition and cultural programme. Nearly 7000 students visited the exhibition. 40 NGOs and 20 schools put up their stalls. Massive public awareness was generated.
- Delhi Council for Science and Technology is going to deliver specialized talks on new frontiers of science and Technology to 2 schools and 2 colleges full week through expert resource persons selected from the Scientific Community.
- Young scientist and outstanding teacher's awards have been constituted.
- M/s Tehlka is organizing a ridge awareness programme with leading Delhi schools to inculcate a sense of involvement in the management & protection of the ridge.

## **2. Air Pollution**

- Through Re 0.25 per litre fee on diesel, by end Nov, Rs. 25 Crores has been collected as Air Ambience Fund and about Rs. 2 Crores has been spent on 29.5 % subsidy for battery operated vehicles. – 3000 mobikes and 100 Reva cars.
- Directions have been issued to the Department of Transport for conversion of 40000 tempos / LCVs into CNG with 12.5 % Vat refund from Air Ambience Fund.
- Directions have been issued to DDCA for prohibiting bursting of crackers during cricket matches at Kotla ground.
- Efforts are being made with Transport Department to connect all 500 Pollution under Control Centres on the Internet to generate daily check report and take remedial action.
- Ministry of Petroleum has been repeatedly approached to provide 50 ppm sulphure - Euro IV norm diesel for Delhi by 2009, exclusively, in view of 5.4 million vehicles plying in Delhi.
- Attempts are being made with Ms Sunita Narain to start congestion tax as a model experiment in CP.

- Tourist and Luxury taxies have requested for 12.5 % Vat refund for conversion to CNG and this is under examination.

### **3. Waste Management – SWM**

- Organic Waste Converter which can convert 500 Kgs of bio-degradable kitchen waste into compost has been installed in the Secretariat, Maurya Hotel, and is being propagated in hospitals, hotels, hostels, Cooperative group housing societies and RWAs.
- Composting has been encouraged in all eco club schools and RWAs to reduce the load on MCD dhalaos.
- Nearly 7000 ragpickers have been trained in segregation of solid waste and provided with apron, gloves and shoes. Another 4000 will be trained by march end.

- **Waste Management – Plastic waste**
- Consequent upon the High Court order banning the use of plastic bags in all main markets and shopping centres, the following steps have been taken.
  - Notification is being issued banning manufacture of bags less than 40 microns
  - Notification is being issued banning the use of plastic bags in all shopping centres and main markets and is being advertised in national press.
  - Vat Commissioner has been approached to extend Vat exemption for inputs used in manufacture of bio-degradable plastic bags.
  - Customs Commissioner has been approached for extending exemption of custom duty on machineries imported exclusively for manufacture of bio-degradable plastic bags.
  - Search and Seizure powers are being enabled for DPCC officials through in amendment of Delhi Plastic rules.
  - Plastic manufactures association has been advised to set up modern recycling units on the Polluter Pay Principle.

- PWD, CPWD, MCD, NHAI and DIAL have been advised to use plastic waste in road making.
- KVIC has been asked to encourage manufacture of handicraft item using plastic waste
- 2 permanent stalls have been taken at Delhi haat to encourage the sell of paper, jute and cloth bags.
- Railway board has been requested to use plastic waste in manufacturing of railway sleepers.
- Delhi Airport, Railway board and ITPO have been directed to ensure proper collection and recycling of plastic waste from their premises.
- BIS has been approached to develop protocol for bio-degradable plastic.
- 35 poly looms have been sanctioned for making value added products from plastic waste.

- **Waste Management – Mercury Waste**
- Is assuming large proportions as more than 1 million CFL has been sold in the city, and BP/thermometers/dental amalgams contain mercury.
- Delhi will be the first location in India to get the reputed MRT Swedish technology to recover and recycle mercury waste.
- Once this is done, the use of CFL will get significant encouragement.
- MAMC has been tasked to estimate the total quantity of mercury generation in the city among healthcare units.

- **Waste Management – Electronic waste**
- Studies reveal that 10000 tonnes of e-waste collected / generated in the city every year.
- Efforts are being made to outsource the creation of a system for collection/processing/ final disposal of non recyclable E-waste.
- 41 firms have shown interest in this venture, and RFP with assistance of PPP Consultant is being issued shortly.
- Once outsourced, buy back arrangement by leading manufacturers of electronic equipments from the public will be put in place.

- **Waste Management – Fly Ash**
- MoEF guidelines on fly ash utilisation have been brought to the notice of all construction agencies in Delhi.
- 2 power plants in Delhi are reporting full utilization of fly ash waste for landfilling. Small percentage is also being converted into bricks.

#### **4. Climate Change**

- 5 workshops have been held with concerned Delhi Govt. Departments to sensitize them on issue relating to climate change and CDM mechanism. Presentation also made in CS's meeting to all HODs.
- A carbon mapping project has been assigned to Department of Environment Studies, Delhi University and final report will be received by Dec. end.
- MGI is being renamed MGICCC to equip it with new faculty and develop it as a leading centre for combating climate change in city. Demonstration units of solar energy, hydrogen energy, biofuels, etc will be created for wider applications in the city.
- Solar water heating can replace 5 lakhs geysers in the city saving 400 MW of power. Through EEREM centre, this is being pushed in schools, colleges, hotels, hospitals, group housing societies, offices, restaurants and farm houses and the government notification is being advertised regularly.

- **Solar lighting** is being encouraged in parks and gardens.
- **Solar cooking systems** are being planned in 65 locations where mid day meals are being prepared for school children.
- **Solar signages** are being encouraged in 2000 ecoclub schools / colleges through an NGO in Delhi, which have private sponsorship for the same. If successful all night electric signages in the city.
- **Solar Air Conditioning** is being tried in the Secretariat through a Pune based firm M/s Sharda Invention.
- **CFL** can replace more than 15 millions incandescent lamps operating in the city rendering 50 – 60 % energy efficiency and saving nearly 1200 MW of power. Power savings alone make the CFL pay back period less than 1 year. Hyatt hotel is completely run on CFL.

- **Rain water harvesting** : Delhi Govt. is committed to setting up such structure in all educational institutions and Rs. 35 crores has been earmarked for this in the plan budget. PWD has to deliver the goods here. In 37 schools, Department of Env. has already established such structures.
- **Paper Recycling**:- All big paper guzzlers are being directed to set up paper recycling plants and propagate use of recycled paper. 100 schools have been provided small paper recycling plant and more organizations are being motivated to do so.
- **Energy Efficient buildings**: All infrastructure agencies have been sensitized to go for such buildings with zero waste and highest energy efficiency. PWD is going ahead with 4 such buildings.

## **5. Generating Public Awareness:**

- 2 advertisements release weekly to spread environmental awareness.
- Digital display has been done at 5 important traffic intersections for curbing vehicular emissions.
- 64 Metro coaches and 15 metro stations carry environmental messages regularly.
- Jingle on FM radio is released regularly.
- Participation in seminars, conferences, workshops, exhibitions, melas is a regular feature.

## II Delhi Pollution Control Committee

1. DPCC has the primary responsibility of controlling air and water pollution in the city through the Air and Water Act. It also monitor hazardous waste through Hazardous waste management rules, control noise pollution through Noise pollution rules and monitor DG sets through DG set notification. Environment Protection Act and EIA notification are also implemented through DPCC. Other waste management laws like SWM and BMW are also enforced.
2. **Air pollution :**
  - 40 location air monitoring is done every month to check 5 major air pollutants namely SPM, RSPM, NO<sub>x</sub>, SO<sub>x</sub> and CO. This is the most comprehensive study anywhere in country and enables us to check and take remedial action for improving the ambient air quality of Delhi.
  - Emission control systems are being pressed for in all air polluting industrial unit in Delhi and more than 600 have been established so far.

- 6 teams regularly visit all the 9 districts to check and curb leaf burning, and since Nov 2007, 478 inspections have been done and 99 notices have been issued to the defaulter under Air Act.
- Diwali monitoring was specifically done as per CPCB guidelines and prompt action by way of curbing cracker licenses, and monitoring by PCR vans, created the least noisy and cleaner Delhi this time compared to last few years.
- All malls, construction projects, hotels have been directed to seek consent to establish before setting up their units under the Air and Water Act and environmental damages have been imposed for clear violation under these Acts. This has resulted in a very strong deterrent effect on new construction in the city not to violate and pollute the air and water quality of Delhi. 46 such units have deposited nearly Rs. 15 crores by way of damages and 20 crores by way of bank guarantees so far. All the 200 odd projects are being monitored on a regular basis.
- To ensure appropriate stack height of DG sets, 6000 cellphone towers and 600 nursing homes have been directed to take appropriate action. Wherever possible inverters are being tried out to replace the polluting DG sets.

### **3. Water Pollution:**

- All major hotels, hospitals, construction projects have been directed to set up STP/ETP for treatment of their wastewater and its effective usages. As a result, 150 such projects have either installed or are in the process of installing such systems reducing a substantial load on the DJB network. Many hospitals are also setting up and recycling the wastewater for horticulture purposes.
- 1200 industrial units have set up ETPs to process their trade effluent and more and more units are being encouraged to do so.
- 34 STPs are being monitored monthly basis for water quality. 11 CETPs are also being checked for their water quality every month.
- River Yamuna is monitored for water quality at 9 locations every month and 24 drains are being monitored monthly.

- 6 Water treatment plants are being checked for water quality monthly.
- 5 Thermal Power Plants are being monitored for treated wastewater monthly.
- At 34 locations, ground water quality is checked monthly.
- At 3 landfill sites, ground water is checked on quarterly basis.
- As directed by LG, water bodies monitoring will commence from Dec 08.

#### **4. Noise Pollution**

- Notification has been issued declaring an area of 100 mtrs around all educational institutions, courts, govt. office complexes and 100 bedded hospitals, as silence zones under noise pollution rules.
- All hotels, hospitals, construction projects, cellphone towers and nursing homes have been directed to have acoustic enclosures in their DG sets to curb noise pollution.
- Noise monitoring is being done at same 40 locations as air monitoring and by and large norms are being met during day time.

## **5. Solid Waste Management**

- Consent to establish has been granted to 3 compost plants from solid waste at Okhla, Tikri and Bhalaswa
- Consent to establish has been granted to conversion of waste to power at Okhla, Timarpur for generating 16 MW. Similarly 10 MW at Gazipur.
- Authorization has been granted for engineering sanitary landfill site at Jaithpur.

## **6. Biomedical waste management**

- 2 Private Operators have been outsourced this work and more than 2500 healthcare units are covered by them.
- DDA has been requested to provide 2 acres of land for 1 new operator and for shifting of an existing operator.
- 718 medical units have been granted authorization under BMW rules.
- 3 Committees decide the authorization cases in the categories of less than 10 beds, 10 – 50 beds, and more than 50 beds.
- Bio-medical waste management in Delhi is probably the best in the whole country.

## **7. Hazardous Waste**

- MoEF is pressing hard for the TSDF facility for hazardous waste in Delhi
- Ghuman Hera site has not been accepted by the villagers.
- Land acquisition at Khanzawala village is awaiting LG's orders. If 50 acres site is made available, TSDF facility on PPP basis will come up like 12 other states in the country to cover 2000 units creating such waste of nearly 5300 MTonnes per annum.

# III Forest Department

## 1. City Forests

- Out of 14 existing city forests, 5 have been outsourced for maintenance and 2 more are being outsourced shortly. 6 are being maintained departmentally and one belonging to the railways has to be surrendered for Anand Vihar terminal. Out of these 14 city forests, 3 are already notified and proposals for have been submitted to Secretary (revenue) for notification as protected forests. The remaining 7 are under process for getting the revenue details completed.

- 9 new City forests were created in 2007-08 of which 8 have been outsourced for maintenance and 1 is being done departmentally. These 9 city forests will also be notified as protected forests as soon as the revenue details and maps are ready.
- 9 new city forests have been created this year of which 4 have been outsourced, 3 are being outsourced and 2 are being done departmentally. 3 of these are already notified and rest are being processed for the same.

## **2. Tree Felling /Tree Pruning Permissions**

- This is a bone of contention in the city. With great difficulty, pending application and their clearances have been put on the website for the first time and are being monitored every month.
- All 3 divisions have collected security amount of more than 3 Crores and an action plan is being developed for its utilization as per the norms and the requirements.

### **3. Ridge**

- Ridge Management Board meets regularly and takes decisions on matters relating to the ridge. Recently clearances have been given for Metro lines.
- A ridge improvement plan has recently been prepared with the help of Prof. Babu and the entire central ridge of about 800 hectares is being taken up for improvement through the funds available with the Ridge Management Board.
- For the Northern ridge, DDA has submitted ridge improvement plan which is being scrutinized by Prof Babu and will be taken up shortly.
- A ridge demarcation exercise has been initiated for the first time for the south and south central ridge to cover 30 villages, a task mentioned in the MPD 2021, and pending for more than 60 years. This demarcation will finalize ridge boundaries in consultation with DDA.

#### **4. Water Bodies**

- The Department has 12 water bodies which have been revived and greened.
- 82 water bodies have been received from Irrigation department for greening, 70 have been completed with the help of DIAL as compensatory afforestation.
- 100 more water bodies will be received and will be greened with the help of DIAL.

## **5. Eco Task Force**

- ETF is in operation in Bhatti Mines since 2000 and its term is now being taken up extension in EFC.
- Another ETF company is being planned for Asola wildlife Sanctuary and taken up in EFC.
- German Environment Minister visited ETF last week and wants to replicate this in Germany.

## 6. CDM

- Forest department is the first department in the country to develop an afforestation project in Bhatti Mines.
- This CDM project will provide carbon credit worth 7 lakh tonnes of CO<sub>2</sub> for 30 years.
- It is being submitted to MoEF and after its approval will go to the Executive Board at Bonn.
- A second CDM project for Asola wildlife sanctuary is also being planned

## **7. Monkey Rehabilitation**

- 7600 monkeys relocated in Asola
- Feed being provided twice a day through Azadpur Mandi.
- By March end, about 9000 monkeys bordering 90 % of its population in Delhi will be relocated

## **8. New Projects**

- With the help of FRI, Dehradun, following projects are on the anvil :
- A bamboo garden of 2 acres at Garhi Mandu.
- A herbal garden in 40 acres at Garh Mandu and at the Ayurvedic College on Delhi Border.
- A Museum at Hauz rani Forest
- A garden showing different tree species of Delhi
- Common Wealth Garden is being developed with the help of NDMC.

## **9. DPGS**

- Created this year and CEO in position.
- Executive Committee and governing council has met.
- 2 meetings held with LG and next Governing body fixed for 15<sup>th</sup> January.
- 8 activities task planned to be implemented by Dec.
- 100 Parks and Gardens by next year.
- MoU being vetted by Law and Finance Department

## **10. Issues of Forest Department**

- Creation of 4 posts of ACF, 10 Forest rangers, 6 wildlife inspectors, 16 Dy. Rangers, 56 Foresters and Forest Guards.
- Legal officer post creation
- Increase of green cover to 25% in Delhi by 2010 for which land from revenue department will be required.

Thanks