Workshop on Environmental Fiscal Reforms and Goods and Services Tax Regime

A report by NIPFP

Organized by Tamil Nadu State Planning Commission & National Institute of Public Finance and Policy

February, 26, 2015. Taj Vivanta Hotel, Connemara, Anna Salai, Chennai
Background

The environmental challenges in India are many and complex in nature. They call for a variety of instruments and policy measures for the protection of the environment and management of natural resources. Even though market based and fiscal instruments are gaining acceptance as important policy mechanisms for achieving environmental protection goals, developing countries such as India have continued to use command-and-control policies. If carefully designed and implemented, fiscal instruments such as eco-taxes (tax on polluting inputs and outputs) provide a framework for a coordinated intergovernmental (state and central) approach to tackle issues of pollution in keeping with India’s growth requirements. The basic argument is that environmental fiscal reforms can help correct false price signals within the economy and free up economic resources through a range of taxation and pricing measures, while furthering environmental goals. The aim of fiscal instruments such as eco taxes is to shift the cost of pollution to the polluter and reduce the societal cost of achieving a certain level of environmental quality. At the same time, they facilitate reduction of distortionary taxes on labour and capital, making them cheaper, leading to increased output, employment and resource productivity. Many European countries have now started using a number of eco-taxes for controlling pollution and meeting environmental targets including those relating to climate change.

India is at the threshold of entering into the goods and services tax (GST) regime. In its present form, the GST may have perverse environmental consequences unless suitable provisions are built into the system. Integrating environmental concerns into the GST is potentially a big opportunity. This is thus an appropriate time to consider integrating environmental considerations in the GST regime.
Objectives of the Workshop

In this context, the State Planning Commission Tamil Nadu in collaboration with the National Institute of Public Finance and Policy conducted a workshop on “Environmental Fiscal Reforms and Goods and Services Tax Regime” (For the Workshop Programme see Annexure 1). The workshop provided an opportunity to bring together various stakeholders (policy makers from Central and State Governments, academics, consultants and practitioners) to:

- Identify the relevant issues to be taken into account in the formulation of Green GST and associated fiscal reforms in the form of a report;
- Take stock of the range and implementation experience of EFR both in India and in other countries;
- Deliberate on need and scope for integrating environmental issues in the ongoing tax reform process; and
- Based on this preliminary investigation, consolidate the emerging policy suggestions.

Inaugural Session

The workshop was appropriately opened with the inaugural address by Smt. Santha Sheela Nair, IAS (Retd) Vice Chairman, State Planning Commission, Tamil Nadu. Welcoming the participants to the workshop she apprised them of the need for deliberations on integrating the environmental fiscal reforms into the GST. She said that the state of Tamil Nadu has been performing fairly well as per the revised estimates on the national economy. The state also has one of the highest rates of urbanisation. However, this progress is accompanied by various concerns like rising pollution and soil salinity. Hence, to bring the state on the path of sustainable development model it is essential to add an environmental dimension to the proposed GST reforms, besides various other measures such as implementation and enforcement of appropriate measures to contain water, land and air pollution.

Dr. Sugato Dutt, Member Secretary, State Planning Commission gave a brief overview of the workshop. He emphasized the need for such a workshop and recapped the objectives of the workshop.
Technical Session I: scope of coverage of EFR within GST framework

This session included two presentations. The first presentation was by D.K. Srivastava, Honorary Professor, Madras School of Economics & Chief Policy Advisor, EY, on ‘GST regime: Scope of integration with environmental fiscal reforms’. The main points made are summarised as below:

The GST has been held back for a variety of reasons: States have been fearful of losing their revenue autonomy; The compensation mechanism offered by the central government has been believed to be unreliable; Under the existing GST design of averaging of revenue neutral rates (RNR) across states, the rate can be as high as 27%; and there is plenty of scope for cascading.

He said that a non-rebatable excise/sales tax on polluting and demerit goods, integrated into the GST framework can bring the RNR down to 14%. Any residual cascading will only be with respect to taxation of ‘bads’ forcing the producers and consumers of polluting and demerit goods to adjust their behaviour in desirable directions. The problem of compensation is bypassed as the states likely to lose in the current design of GST, i.e. the ‘net producing states’ will be the ones receiving the additional revenue through this integration. Environment management would largely be self-driven through a disincentive mechanism of differentially higher taxation of polluting goods. This would also be in line with the current international practice of tax reforms who are now introducing a ‘green shift’ into their existing VAT structures.

He identified a few constitutional changes which were required for successful integration of environmental taxes into GST. This included modification in entries 54 and 74 of the seventh schedule and removal of 1% tax on interstate supplies.

The second presentation was by K. S. Kavi Kumar, Professor, Madras School of Economics on ‘Environmental Taxation: Global Context’. The presentation focussed on international experience with EFR. Many developed countries; in particular those of the EU, where VAT has been in existence for some time, have now extensively started using a number of eco-taxes for controlling and meeting their environmental targets, including those relating to climate change. On the international front, eco-taxes have usually targeted three main areas:
• Transport – through differential taxation on vehicles based on fuel efficiency; and congestion charges.

• Energy – by taxing fuels which feed into energy generation.

• Waste generation and use of natural resources.

In EU, about 6 to 7 % of total tax revenues are from environmental taxes. In Germany, a set of eco taxes were introduced in several steps with gradual increases every year to make energy and resource consumption more expensive while reducing labour costs. Exemptions and reductions were given to particular sectors (e.g., agriculture). Labour costs were cut simultaneously by reducing the pension contributions. Other instruments such as voluntary agreements, financial support programs, innovation support programs, labelling etc. were also used to achieve energy efficiency. This resulted in the emergence of low-carbon vehicles and energy-efficient houses, penetration of renewable energy, and development of waste management technologies. Overall, the EU experience suggests that environmental taxes are effective when directed at the source of the issue. Environmentally successful green taxes include – Danish energy/carbon taxes, Swedish NOx tax, German energy and transport taxes, UK fuel duty escalator, Finnish, Swedish and UK waste taxes, and the Dutch effluent charge. Evidence also shows that green taxes have a negligible impact on GDP implying that the fear of ‘no-growth’ economies is unfounded.

Some examples of successful EFRs from the developing world are: China’s Pollution Levy System, Singapore’s Electronic Road Pricing and Vehicle Ownership Quota System, South Korea’s Volume Based Municipal Waste Charge, and the introduction of CNG in Delhi, India.

The potential sectors for intervention for the state of Tamil Nadu were identified as follows:

• Cement - Through process and product modification and energy taxes (e.g. coal cess) and subsidies for cleaner technologies.

• Transport - Through energy and congestion taxes and subsidies for cleaner vehicles.

• Energy - Through energy taxes and feed-in tariffs for promoting renewable energy.

• Buildings – Through property tax exemptions for green buildings and increased relative cost of resident parking permits.
Technical Session II: opportunities to introduce EFR within the broad framework of GST

This session was divided into the following four breakout sessions. Each session focused on an identified sector of the economy to examine opportunities to introduce EFR within the broad framework of GST.

**Land and Water (Parallel session I)**

Leading the discussion, Paul Appasamy expressed that land and water are two important subjects of concern for environmental fiscal reforms in India. Environmental and/or resource taxes levied on land and water in India are fundamentally different from those of other countries, in particular the OECD countries. The OECD countries levy a water abstraction tax to control the inefficient use of water, on the other hand other developed countries impose water pollution taxes based on presence of pollutants such as suspended solids, BOD/COD, nitrogen, phosphorus etc. In most countries, the proceeds from such taxation are primarily directed towards pollution abatement activities. In India, The Water Act makes provision for water charges (varying across states and cities) for use of water in agriculture and urban water supply. A cess is also levied by the state pollution boards on the water used by the industries which is very small to make any impact.

To counter land pollution, OECD countries levy on taxes on pesticides and fertilizers based on their level of toxicity or potential damage. In land-use there is a trade-off for economic agents based on the use the land is devoted to (for e.g. between land allocated to agriculture and mining). Such trade-offs make imposition of taxes on a certain group of economic agents difficult and also complicate provision of compensation to those suffering damages. In India, subsidization of fertilizers and pesticides has exacerbated the detrimental effect of these on the environment. International experience also suggests that levying of a landfill tax results in greater recycling.

The panellists concurred that integrating ‘eco tax’ with the GST needs serious consideration for effective environmental policy making in India. Reduction of subsidies could be taken up first. For India, besides a command and control based approach, there is a need to implement fiscal instruments such as a tax on water pollution, tax on environmentally damaging
inputs/outputs and tax on pollution in general. Tax considerations for protection of vulnerable ecosystems and environmentally susceptible zones such as hilly areas and coastal regions need to be discussed further and brought to the fore.

**Urban Air Pollution (Parallel session II)**

Vinish Kathuria initiated the discussion by stating that in India, mobile or vehicular pollution can be held largely responsible for poor air quality. This situation is further aggravated by the fast pace of economic growth. In mega cities, vehicular pollution contributes upto 60 percent of total urban pollution.

Vehicular emission is among a variety of other factors that lead to vehicular pollution problem. Other than vehicular emission, fuel adulteration and traffic congestion also contribute to vehicular pollution. Lack of appropriate and exhaustive information on the impact of air pollution and its extent (e.g., health effects due to air pollution) prevents incorporation of all possible damages into policy instruments. Further, the difficulty in separating health effects across fuel types or vehicles forces responsibility be shared uniformly among them.

Main suggestions:

- Strict enforcement of regulations pertaining to vehicle conditions to improve urban air quality.
- Environmental tax needs to be imposed on dirty fuel categories while allowing subsidies for cleaner fuel types.
- Both direct environmental taxes (for e.g. based on engine conditions) and indirect environmental taxes (e.g., based on usage of fuel type, say, diesel vehicles) can be used to control vehicular pollution.
- The elasticity of demand and supply of various fuel type categories must be taken into account while designing environmental policy instruments.
- In India, the presence of environmental taxes is scattered across the board, these could be consolidated and brought together under the GST umbrella.

**Energy Sector (Parallel session III)**

The discussion in this session was led by U.Sankar. He highlighted the issues pertaining to measurement of external costs in the energy sector in India. One of the main challenges in the
energy sector arises due to the varying pollution intensity across sources e.g. coal, petroleum, etc. Hence, with limited availability of external costs information, it is difficult to arrive at an appropriate price that would internalize such external costs. The means of internalizing the external costs were also discussed. The question, whether taxing of factor inputs is more appropriate as compared to taxing pollution was explored, recognizing that direct/one-to-one correspondence between goods and pollution does not exist in all cases. Taxing pollution is problematic as it is difficult to define and measure ‘pollution’. It was noted that in the long run, technological change could result in some polluting firms become less polluting with availability and access to new and cleaner technology.

With regard to integration of environmental taxes (ET) with the GST, Professor Sankar mentioned that although the environmental taxes along with GST would allow for revenue autonomy to the states, it may in turn lead to inter-state competition among states for raising revenues by differentially taxing the polluting goods. The appropriateness of earmarking of proceeds from taxation is also questionable as socio-economic and political factors often tend to influence the decision to earmark such funds. While considering behavioural problems relating to Pigouvian tax based approach, there is a need for a mix of both market- and non-market based instruments in tackling negative externality.

Another problem which was identified was regarding coal cess. Coal cess is collected at the central level even though the damage occurs at the state level. Moreover, the cess collected has not been put to the use originally envisioned i.e. innovation of cleaner technology. Rita Pandey said that it was important that cesses be collected at the level at which the negative externalities are borne. She also pointed out that if firms found it costly to update their technology to cleaner alternatives they might actually prefer to pay taxes. She also suggested that it was important that the revenue collected from coal cess be utilized in line with the objectives of the National Clean Energy Fund.

The discussants agreed that given the limited availability of external costs information in the energy sector, it remains important to signal the relative social costs of energy with the help of alternative sources. Pertaining to means for internalizing of external costs, taxing polluting inputs may be easier as compared to taxing pollution. It was argued that the dynamics of technology need to be taken into account in calculation of external costs across various industry types within the energy sector and across sectors.
With respect to this Rita Pandey added that green ratings exist for polluting industries and these could be used in designing environmental fiscal policies. Responding to the issue of inter-state competition that could be induced by environmental taxes along with GST, D.K. Srivastava argued that the issue can be tackled by states agreeing to a floor-rate structure for the taxes on polluting and demerit goods. Moreover, environmental management could become self-driven through environmental taxes integrated into GST due to its built-in checking mechanism that would provide incentives to producers of polluting and demerit goods to adjust their behaviour in desirable directions. The need for giving more flexibility to the authorities in deciding where the proceeds from eco-taxes would be used was emphasized. In view of problems associated with the first-best (Pigouvian taxes based) solution, it was suggested that a combination of taxation and regulatory measures acting complementary to each other might be more practicable.

Rathin Roy observed that in public economics, cesses serve a purely optical purpose and have no earmarking effect unless collected directly in proportion of pollution caused by the input (for eg. coal), as the same funds can be collected through general taxes. He also observed that in the statement of revenue foregone of the government there were a number of areas which might have environmental implications. For instance, the government provides tax exemptions for electricity generation. It was put forth that distinguishing between power types was important.

**Waste Generation and Disposal (Parallel session IV)**

The session was chaired by K. Skandan, Chairman, Tamil Nadu Pollution Control Board. Shilpi Kapur, focused on the scope of introduction of, and political economy aspects of fiscal instruments for waste management. Manjeet Saluja, discussed e-waste management in India, and identified environmental fiscal instruments which could be used to minimize e-waste. K.S. Venkatagiri, elaborated on the necessary steps for proper waste disposal which include: creation of a waste data bank, segregation of wastes, and promotion of waste handling and recycling businesses. The presentations highlighted that there is a significant gap between the quantity of waste collected and waste generated across India. An important challenge for waste management in India is the lack of organized scrap collection system. There is no segregation of waste as degradable and non-degradable at sources which leads to a great amount of untreated waste. This imposes stress on financial resources. Lack of efficiency in the collection and transportation of waste (e.g., uncovered transportation of waste and dumping) remains a major drawback. E-waste and bio-medical waste contain hazardous
toxins such as lead, cadmium (computer batteries) etc. The presence of such harmful chemicals in the environment has increased manifold in recent times due to the enormous increase in consumption of electronic goods.

The panellists highlighted that a time-bound plan was necessary for processing and disposal of the waste. User charges could be devised with respect to utility bills/volume/weight of the products. For better management of waste and adoption of efficient means of waste disposal, subsidies could be provided for in-house recycling and waste treatment. Pertaining to e-waste, it was suggested that a proper framework (product design-recycle) be designed for recycling of the electronic items which could provide additional resources for further production. Along with this, making green labels mandatory, formulating a disposal policy for bulk consumers and a deposit refund system can also help improve efficiency in waste management. Differentiated taxes could be charged for different categories of pollution. For example, pollution tax could be charged for different levels of pollution based on intensity categories (Red, Orange, and Green). It may also not be wise to tax pollution uniformly across states. Taxing end-users at the destination is preferable to taxing at the source as it will not hurt the producing states. Introduction of a general tax to promote safe technology in waste disposal management could also be a viable option. Introducing a cess per ton of waste disposal in landfills may also help curb solid wastes. In the case of industries, the polluter pays policy must be advocated for external damage imposed by polluting industries. Similarly, incentives should be given to those who dispose waste properly and use wastes as raw material in their industries. Such an approach could result in viable business opportunities with respect to waste management. The waste management hierarchy of Avoidance followed by Minimization, Recovery and Co-processing should be made compulsory for waste disposal. Construction, operation and proper maintenance of waste treatment facilities needs to be ensured. Further, concessions/incentives need to be given to economic agents that successfully decrease waste levels below prescribed limits. The discussants also agreed that the proceeds collected from environmental taxes under the GST umbrella should not be subsumed and should be used only for the purpose of ensuring better environmental quality.
Technical Session III: The scope and possibilities to introduce EFR within GST

This session was a panel discussion to discuss the scope and possibilities to introduce EFR within GST. It was chaired by K. Rajaraman, Commercial Taxes Department.

D.K. Srivastava asserted that in the context of GST, the standard rate can be reduced by integration of environmental concerns in GST. It was also contended that states should have autonomy over raising revenue commensurate with their expenditure responsibilities. By taxing environmentally harmful inputs one can address a large part of the problem of pollution through the provision of appropriate disincentives to the polluters. A prerequisite for future progress is an empowered human resource base. For this, it is essential that we work towards the internalisation of the externalities and take care of the health and productivity of the people. It might be possible to fund programmes like the Swatch Bharat Abhiyan through taxing the ‘bads’.

U.Sankar noted that internalisation of external cost is necessary for efficiency. For equity purposes targeting and compensation may be used. Regarding feasibility, it might be best to start with taxes on inputs and outputs and then gradually shift towards pricing of pollution.

Paul P. Appasamy alluded that EFRs need to be looked at beyond the context of GST. In the case of SSIs, GST framework does not apply. It is possible to use a number of instruments at the municipal level. There is also a need to strike a balance between environmental protection and manufacturing activity which generate revenue and create employment.

Vinish Kathuria expressed that issues in vehicular pollution could be dealt with by introducing annual registration based on the age of the vehicle and differential cesses based on the fuel used by the vehicle which has been demonstrated and supported by studies conducted by Rita Pandey. Emission trading along with congestion taxes was also identified as an option for reducing vehicular pollution. Green building has huge potential in the coming years and can serve to minimise human impact on the environment. Green building designs can be promoted through a variety of incentives such as provision of additional floor surface area, differential property tax and lower interest rates for a green home.

Shilpi Kapur and M.S. Saluja proposed that environmentally harmful activities in the informal sector should be addressed by creating incentives to bring them to the formal sector.
For this, a mix of incentives for environmentally good behaviours and disincentives for environmentally bad behaviours should be used. One must also take into account that some areas and cities are more vulnerable and require special attention. Subsidies for Common Effluent Treatment Plants (CETPs) was also suggested. Increasing awareness is also important for minimizing waste generation and conscientious disposal of waste.

Sarvar Alam stated that revenue from tourism in a particular area needs to be fed back into the waste management of that region. Shimla green tax was given as an example (to be kept out of the GST)

Santha Sheela Nair stressed that there needs to be more focus on waste minimisation. Appropriate incentives needs to be designed in this context.

K R Shanmugham pointed out that if the final consumer of highly polluting products is located in another state or country, then that state should pay the penalty for it. Dual rate regime is considered to benefit poorer sections of the society. If the standard rate is too high it will further affect the poor and if too low then dual rate is not required. A single rate with differentiated rates for polluting and demerit goods may be useful.

Mohan Ram alluded that vehicles often not registered in the city still play in the city. So pollution control norms are rendered ineffective. There is a need to think of strategies to address this.

K Rajaraman recommended that proceeds of tax should go into a separate fund, it is important to decide on how we could ensure this.

Rita Pandey asserted that there is a possibility for linking a cess to the fuel used and other attributes of the vehicles. The cess could be decided based on life of vehicle, its age, fuel and technology used.

Rathin Roy posited that smart cities rely on public transport and not private transport. Transport policies should promote converting vehicles to CNG without dis-incentivising use of public transport. Without transport policies providing such incentives, GST might provide just sub-optimal solutions

K S Venkatagiri emphasized that polluters must necessarily pay and people who process waste generated must be encouraged. Waste management should be a viable business proposal. One should differentiate in the tax rates for people who send waste to landfills.
The following were the major policy and follow-up suggestions which came through during the panel discussion:

- There was general consensus on the polluter pays principle in the context of the specific environmental issues and identified sectors discussed in the workshop.

- Revenue generated out of environmental taxes should be maintained as a separate fund to be utilized for environmental management and in the localized environment where the revenue was generated. This will not only help address the issue at hand and improve the environmental quality of but will also help achieve buy-in from people for additional charges/cess etc.

- In the context of GST, the system of compensation to the states losing revenue will involve estimation errors and is dispute prone and hence inferior to revenue autonomy.

- There are several fiscal tools which can ensure environment management/reduction of emission which are out of the purview of GST, they require more emphasis. GST might not be applicable to the MSME sector nor would it incentivize them, hence alternate tools need to be designed

- Comprehensive regulatory and policy frameworks need to be developed along with GST to ensure the desired impact (promoting CNG and LPG might incentivize their uptake but not increase public transport usage; hence a robust policy is necessary).

**Valedictory session**

Dr. Rathin Roy, Director, NIPFP in his valedictory address highlighted the various prospects and predicaments of EFR under the GST regime. He acknowledged that the motivation for EFR and GST are different. While, fiscal reforms as a whole address issues relating to allocative efficiency and stabilization of the economy, environmental fiscal reforms aim to bring in the dimension of sustainability to fiscal reforms. Traditionally, governments have used expenditure as a tool for improving allocative efficiency, revenue measures are of more recent origin. On the other hand, motivation for GST is to improve efficiency through reduced cascading and bring the tax structure more in line with the globalised world. Hence, fundamentally EFR and GST do not coincide and problems of incentive compatibility arise as
one can only tax environmental ‘bads’ if they continue to exist. However, carefully designed fiscal policies which take into account environmental concerns have proven to be successful. Dr. Roy noted the following:

- Taxing the ‘bad’ has to be a normative proposition.
- Negatively taxing the ‘good’ is important to assist private agents pursuing environmental goals. However, in implementing this one needs to be careful that industries and other agents do not appropriate the government and use tax incentives for projects undertaken in their own self-interest. This requires that one follows the principle of parsimony in tax administration and makes simple rules.
- It is important to examine how taxation can complement the government initiatives to direct public behaviour on a more sustainable path.
- Calibrating environmental taxes is a bad idea as it can have unforeseen negative consequences. It is difficult to take into account all possible details in designing the tax and hence calibrating taxes can hurt some states or districts unintentionally.
- Public finance involves trade-offs. One of the most important things to keep in mind while designing environmental taxes is incidence shifting. A shift in the environmental tax burden will fail to remedy environmentally bad behaviour. Moreover, it can be particularly harmful if the tax burden shifts to target populations such as the poor or tribal populations.
- The agenda of integrating EFR into the GST should be pursued at the state or sub state level. Most of the issues relating to EFR require a political context, local knowledge or a certain awareness of structure which increases sub nationally. Questions regarding pollution of solid waste and tax regime thereof should be local authority questions.

Rita Pandey, Professor, National Institute of Public Finance & Policy summarized the proceedings of the workshop. While in this report the main policy suggestions as well as the windows of opportunities emerging from each technical session have been summarised above; the key policy suggestions in terms of the future work on EFR would be:

- The agenda of integrating EFR into the GST should initially be pursued at the state or sub state level.
EFR had attracted increasing attention in the recent years owing to various socio-economic and environmental factors including fiscal consolidation and recognition of the financial burden of certain measures taken by the countries previously, such as fossil fuel subsidies. However, despite many efforts EFRs remain limited. For instance 88% of annual GHG emissions are un-priced. Environmentally harmful and/or ineffective subsidies remain significant in several sectors (e.g. agriculture, fisheries, energy etc.).

Designing effective EFR requires a sound understanding of environmental and fiscal policy, as well as how each is regulated in practice. This requires co-operation between fiscal and environmental experts, as well as experts from the relevant ministry/sector (e.g. transport, energy, rural/urban development). Such inter-ministerial cooperation has not come about so far, especially in developing countries including India. For instance, recent success stories of implementation of coal cess; differentiated excise duty on motor vehicles; and regulation on mandatory disclosure on fuel efficiency of vehicles was a result of sound technical work by NIPFP and MSE; continuous dialogue with the industry bodies and the willingness of the central Ministries of Finance and Environment and Forests to implement EFR. Similarly a number of EFR initiatives have been taken in various states. There is need to accelerate this process.

Designing a sound proposal for EFR is only one part of the story. It is equally important to understand and negotiate political, social and institutional barriers if proposals are to be effectively implemented (e.g. identification of potential impacts of EFR on vulnerable groups and options to mitigate these impacts -- compensation measures to alleviate adverse impacts of GFR on vulnerable groups/sectors/households; earmarking of revenues for provision of environmental services; institutional capacities for monitoring and review processes).

Overcoming these factors requires deep analysis/understanding of the political context, and an examination of the various steps involved through the EFR policy cycle, the challenges to be faced at each stage and the main stakeholders involved (e.g. stakeholder communication and engagement strategies). The EFR policy cycle involves a number of linked and often over-lapping phases. Identifying likely winners and losers and understanding the perspectives and interests of affected stakeholders,
and how the revenue raised (or freed up) as a result of reform is allocated is also crucial.

- A strong motivation and political will is required to set this process in motion. In terms of a strategy for EFR, it might be best to start with taxes on inputs and outputs and then gradually shift towards pricing of pollution. In Tamil Nadu, transport, energy, buildings, and small and medium industries sectors present several opportunities for implementing EFR in the first phase. Identification of specific interventions and choice and design of instruments would require work in a mission mode which is represented by the relevant state government ministries/departments, subject experts, industry and civil society.

Dr. K. R. Jahan Mohan, Tamil Nadu State Planning Commission concluded the workshop and gave a vote of thanks to all the resource persons, participants, and sponsors.
Pollution has serious implications on economic growth and welfare by depleting resources, adversely impacting health and aggravating the negative impacts of climate change. Though market based and fiscal instruments for pollution control (taxes, subsidies and trading instruments) have advantageous properties compared to the command-and-control mode of environmental regulation, many countries including India still use the latter. Carefully designed fiscal instruments such as eco-taxes (which tax polluting inputs and outputs rather than pollution directly), provide a framework for a coordinated intergovernmental (state and central) approach to tackle issues of pollution in keeping with India’s growth requirements. Eco-taxes are not meant to be a revenue-augmenting device. Instead, the idea is to change the structure of taxation without putting additional burden on the tax payers. They reduce the use of resources and pollution by making them more expensive. At the same time, they facilitate reduction of distortionary taxes on labour and capital, making them cheaper, leading to increased output, employment and resource productivity. Many European countries have now started using a number of eco-taxes for controlling pollution and meeting environmental targets including those relating to climate change. Since India is at the threshold of entering into the goods and services tax (GST) regime – the last mile of the indirect tax reforms, this is an appropriate time to consider integrating environmental considerations in the GST regime.

The State Planning Commission Tamil Nadu will conduct the Workshop in collaboration with the National Institute of Public Finance and Policy on 26.02.15 at the Binny Room, Taj Vivanta Hotel, Anna Salai, Chennai. The one-day workshop will bring together policy makers from Central and State Governments, academicians, and other stakeholders. The workshop will flag all the relevant issues to be taken into account in the formulation of Green GST and associated fiscal reforms in the form of a report.

- Take stock of
  - Experiences with Environmental Fiscal Reforms (EFRs)/Green Tax and Budget Reforms (GTBRs) from both developed and developing countries
  - Various interventions with regard to the environmental taxation (and subsidies) at national, state and local levels
- Deliberate on
  - Need and scope for integrating environmental issues in the ongoing tax reform process
  - Linkages between tax revenue and subsidy financing and specifically on the role of environmental subsidies
  - Constraints in addressing the environmental concerns through fiscal instruments.
- Discuss the concerns of states in the implementation of GST and assuaging the concerns revenue losses (to the states)
- Consolidate Policy suggestions in addressing fiscal and environmental concerns.

**Workshop Agenda**

**Inaugural Session: 10:30 am - 11:15 am**

Inaugural Address: Tmt. Santha Sheela Nair, IAS (Retd.) Vice Chairman, State Planning Commission  
Workshop overview: Dr. Sugato Dutt, IFS., Member Secretary (i/c), State Planning Commission

**Technical Session I: 11:30 am - 12:30 pm**

Objective of this session is to highlight the scope of coverage of EFR within GST framework. Two presentations are scheduled followed by Question and Answer session (20 + 10 Mins each).

1. **GST Regime: Scope of Integration with Environmental Fiscal Reforms**  
   Speaker: Dr D.K. Srivastava, Honorary Professor, Madras School of Economics

2. **Environmental Taxation: Global Context**  
   Speaker: Dr K.S.Kavi Kumar, Madras School of Economics

**Technical Session II: 12:30 pm - 1:30 pm**

This session will be divided into four parallel (breakout) sessions and each such session will look for opportunities to introduce EFR within the broad framework of GST

**Land and Water - Board Room I**

**Speaker:** Dr. Paul P. Appasamy, MSE
**Panelists:** Dr. Sugato Dutt, IFS., SPC, Dr.Jayanthi M. IFS, Addl. Director Environment, Dr. K.R. Jahan Mohan, HOD, SPC, Thiru R.K. Haroon, SPO, SPC, Rapporteur: Renjit PS MSE

**Energy Sector - Natraj Hall**

**Speaker:** Dr. U. Sankar, MSE  
**Moderator:** Thiru Sudeep Jain, IAS, CMD TEDA  
**Panelists:** Thiru. Anshul Mishra,IAS., Jt.Commr,CT Dept., Dr. L. Venkatachalam, MIDS, Thiru. Kumara Dhas,HOD,SPC, Tmt. D. Abirami,PO, SPC, Rapporteur: Anubhab Pattanyak, MSE

**Urban Air Pollution - Board Room II**

**Speaker:** Dr. Vinish Kathuria, Prof. IIT-Bombay  

**Waste Generation and Disposal (Industrial/Municipal/Bio-medical/Hazardous/E-waste) - Binny Room**

**Session Chair:** Thiru K. Skandan IAS, Chairman, Pollution Control Board  
**Panelists:** Dr. Shilpi Kapur TERI, Thiru K.S.Venkatagiri CII,Godrej Green Business Centre, Thiru M.S. Saluja GIZ, Thiru R. Kumar, Addl. CEE,TNPCB, Thiru. R. Selvarajan,HOD, SPC, Rapporteurs: Naline G.,MSE, Bipin Sony MSE
Technical Session III: 02:30 pm - 03:45 pm
A panel discussion on Scope and Possibilities to introduce EFR within GST
Session Chair: Dr. K. Rajaraman, IAS, Commissioner, Commercial Taxes Department
Panelists: Dr. D.K. Srivastava, MSE. All the Parallel Session Chairs (Dr. U. Sankar, MSE, Dr. Paul P. Appasamy, MSE Dr. Vinish Kathuria, Thiru K.S. Venkatagiri, CII, Dr. Shilpi Kapur, TERI)
Rapporteur: Thiru Vivek Venkataramani, IFMR

Valedictory Session: 04:00 pm - 05:00 pm
The objective of this session will be to highlight the major policy suggestions.

Summary of the Workshop: Dr. Rita Pandey, NIPFP (will be assisted by all parallel session Coordinators by giving max. 10 Bullet Points on the session) (25 Min).

Prospects and Predicaments of EFR under GST Regime: Dr. Rathin Roy, Director NIPFP (25 Min)

Vote of Thanks: Dr. K. R. Jahan Mohan, HOD, Tamil Nadu State Planning Commission (10 Min).