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## THE PROCESS OF POLLUTION PRICE DETERMINATION IN THE ENVIRONMENT MARKET

#### SATHEESH BABU Kollambalath

Assistant Manager, KSFE, Ltd Ramanattukara Br .PO. Ramanattukara. Kozhikode Kerala .India, Pin 673655 Satheeshbabu kollambalath- India

**ABSTRACT**: This paper discuss the issue of price determination in the market created by Air pollution generated from outside and inside the nation Conventional theory of environmental issue (Ragnar Nurkse and AC Pigoue) is based on hypothesis that largest polluters suffers most than small polluters. Price of pollution is cost generated out of inside pollution (Ackermann-Liebrich). They believed that the 'price of pollution' (rate of pollution related illness and death and irrecoverable loss to environment) is equal to total amount of pollution of that country Such price is equal to pollution generated with in nation. In this paper I formulates certain principle that determine price of pollutions inside the country The thinkers conveniently rejected outside pollution induced price of pollution in the domestic price The rate of domestic price in less polluting nation is relates to the volume of air pollution penetrated from top polluting nations ... This shows that less polluting nation is to bear largest --- price--- of air pollution generated by big pollutes, The price determined by less polluting nation is always at under equilibrium. This means that cost bearded by less polluting nation is greater than that they actually have to undergone out of their own pollution and no compensation is received for bearing cost of other nation. A few thinkers' tears on the consequences of environmental risks are not equally divided between the socio demographic groups within nation. Therefore identifying and focusing on risk groups is sensible risk assessment (Kamppinen). Both Conceptual vs. Empirical methodology is used. In Less Polluting Nations, the amazing fact that I found is that, the content of toxic pollution in there is equal to Top Polluting Nations and also found that air pollution related illness or death is high is less polluted ones and price of pollution (cost undergone out of pollution) is greater than volume of pollution produced by them. This lead to conclude that air pollution particles produced in heavily polluted nations such as USA and China tend to less polluting nations such as Pakistan, Burma, and Afghanistan and impose health and environment crises artificially. In this crises the price is determined at level greater than what actually should have from the inside pollution This is due to peculiar nature earth rotation that push polluted air travels of more polluted to less polluted nations and rise price of pollution .At the same time no particles of pollution travels from less to more to more polluted nation because of motion low of air. More people from less polluted, most of whom were malnutrition is often falling victims of air pollution other nation and put forth new demand for compensation to victim nations

**KEYWORDS:** Conductivity Effect of Nature (CEN), Surplus Pollution, Zero Conductivity Effect of Nature, Self-Generated Pollution (SGP), External Surplus Effect of pollution (ESP Effect), Shrinking Effect of Diseases Gap (SEDG), Excess Service Operation.

# INTRODUCTION

The toxic pollution generated from USA and China- the most air polluting nation in the worldmakes all of us to bear burden of diseases. These two nations together cover more than 40% of global emission of toxic carbon dioxide, as per latest figure. This determines the price of pollution of the world .These toxic particles move to less polluting nations imposing unauthorized and determines for more than 40% price of pollution in all less polluting nations . .In this paper, an attempt is made to covers how these peculiar movement of air carrying toxic particles determine the price of pollution in less polluting nations Thinkers like Coarse, Ranger Nurkse has try to solve social cost—price-- imposed by externalities of pollution generated within the nation ignoring the social cost imposed by arrived pollution- ESP effect .Here in this paper I make a simple attempt to bring equilibrium between internal and ESP effect generated Social Cost of Pollution through compensation for ESP issue

## THE METHODOLOGY

In this paper, conceptual and hypothetical approach are used simultaneously to analyze issue of distribution of pollution particles, produced in one or two nation to all over the world .The empirical data relating to growth of pollution related illness and increasing health cost in less polluted nation are analyzed, with that of polluting nations to prove the fact worst negative impact of pollution penetrated is fall on people developing nation. To prove concept, scientific method is used .This help to determine direction in the movement of polluted air that proves how free air movement from less to most polluted one are restricted .This shift of air of pollution is interpreted for its economic impact and used economic tool to analyze systematic interrelation between arrived pollution and economic crises and try to prove less polluting nation undergoes more adverse effect than polluted nations. The ideal experimentation, and logical observation methodology, helps to conclude that pollution penetrated from other nation can bring about drastic degradation in life expectancy and standard of living mortality rate and finally to debt trap in less polluting nation

## **Determinant of Price of Pollution**

The shifting of 'diminishing environment value is main determinant price. What is environment value and how it diminishes? Dr. Glenn Marine Lange) estimated e- value of environment on the basis of total monetary value contributed by various environmental organs such as fresh air, tropical forest, rivers, and mountain, and rain, marine products towards to the Gross National Product. E value is neither monetary value of environment added to GDP nor it can be measured and exchanged in money terms nor this is polluted value of environment. *Environmental value is the social value obtained from the perfect unpolluted atmosphere – natural value-where there is no inhabitant who suffers out of pollution either penetrated from other nation or generated within the country.* The e value diminishes when its combination, as given by birth, alters by air pollution. The value of environment is felt most often when it began to diminish by pollution .Some ignored non monetary valuations giving less importance to diminishing environmental value penetrated artificially from other nations and its price imposed on less polluting nation. Rolstan and GS Raiand Macer brings value discussion in the plat form of environmental degradation and measured in nonmonetary terms.

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How to diminish the e-value?, The peculiar movement of polluted air cause to diminishes environment value generated in one or two nations. '*The Surplus Pollution* (the excess pollution particles remaining in the atmosphere after adjusting pollution content through photo synthesis *move vide Conductivity Effect of Nature ( CEN)* (movement of air according to density of air) to less polluted nation and leads to diminishes environment value artificially in that nation. This is unauthorized polluted air entered from top polluting nation to less polluted nation This surplus pollution generated from polluting nation moves according to density of air pollution and rest in less polluted nation until stimulation of pollution. It is natural law that determine price of pollution in less polluting nations... This is un owned and unauthorized impact of pollution... In polluted nations, the density of air is found to be high and moves to less polluted nations.

The least polluting countries like India, Pakistan Afghanistan etc has high price of pollution received than from top polluting nations like China and USA. No one in America and China (See Table 1) suffers from unauthorized illness generated out of surplus Pollution emitted from the least polluting nations such as India and Pakistan. The Chinese and American air pollution, shares 23 and 18 % of global co2 emission respectively . These nations contains Pollution particles above 2.5 microns sufficient that can accelerate diseases, But this pollution particles moves to rest of less polluted nation vide CEN and save the nation from imminent dangers but cause to raise the price of pollution in victims nations at higher rate . However, in top polluting nation, the perpetual release of pollution keeps the density of pollution high at all time despite pollution removes by CEN and creates wall of protection In such nations no air pollution particles of other less polluting nations enters because the density of air pollution lingers over the atmosphere is strong enough and protects from effects of surplus, as if the Army/ military force protect the nation from external aggression and threat Hence the particles of pollution is always less than actual air pollution and price determined is less than what would have been if all polluted particles remain there without moves by CEN to other nations. This behavior of self generated protections created and that determine price of pollution at below normal equilibrium .As long as air moves from thick density place to less thick density place, as obtained from peculiar movement of air derived from the rotation of earth — air move from most polluted place to less polluted place, — USA, and China - most polluting nations - can never face suffering from surplus Pollution from other countries and determines price below theactuial level

The total unit of Pollution particles released from all polluting industries within the Motherland in a given period taken together, except Pollution particles penetrated from other nations vide operation of Conductivity Effect of Nature is *Pollution Self Generated (SGP)*. The pollution particles found in less polluting nation is larger than total unit of pollution produced within the country. Inverse happening—pollution penetrated from polluting nation-- is neglected by many of thinkers including Nurkse and Coarse. It should be corrected. The adverse the effect of surplus Pollution vide diminish in the Environment value ,generated and moves by ECN from outside the country and penetrated in to various segments of economy including family budget, Health Cost, life expectancy and mortality rate and finally is termed as External Surplus Pollution Effect (**ESP Effect**),

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List of countries by 2008 emission of CO2	
(In per-cent age basis	

Table 1

Rank	country	Global% of	
		emission	
1	China	23.53%	
2	USA	18.27%	
3	European	13.98%	
	Union's27		
	Nations		
4	India	5.83%	
32	Pakistan	.0.51%	
127	Nepal	0.01%	
162	Afghanistan	.0.0001%	
Source .CDAIC UN estimate 2005-			
2011			

The short run disequilibrium of E- value in top polluting nations caused by surplus pollution is eliminated in the long run by Conductivity Effect and push up the price of pollution in less polluting nation. At the same time the price of pollution in Top Polluting Nations (TPNs) falls due to removal of air pollution by ECN. This tells that removal of disequilibrium in E value in TPNs- one or two nation-- means creation of E value disequilibrium in more than 200 of Less Polluting Nations(LPNs) accelerating the price of pollution of all these nation rise for not of their own cause .This principle works only when there is unequal density of surplus in different nations. If all nations pollute and create same density of air Pollution, no nation can send

their pollution to other nations and price of pollution cannot shift. Pollution travels in descending order, and not in ascending order. The developed nation's particles of Pollution is in 2.5 microns in diameter which are 10-15 times higher than average polluting nations in short time but falls in long run by CEN. The concentration have been increasing 3 to 4 percent annually since 1998 (Sharon Lafranier) means that pollution moves to less polluted one

## **Environment Market (E-Market)**

The price of air pollution is determined in the environmental market. The whole market created by difference in density of air pollution that receive pollution particles as SGP or ESP Effect or by both in exchange of pure air of less polluting nation and which also exchange with Commodity and human resource market in less polluting nations is termed as 'Environment Market' The negative value produced by diminishes in e value either by ESP Effect or by SGP are exchanges among different organs of environment and push up price .It is not disputable The, fresh air is received in exchange of polluted air without any monetary price and, the organs in the environment are forced to receive elements of definite negative value from polluted nations and in turn exchanged This process is done through vide conductivity effect of nature. For example, the residents of Loss Angles - the most polluted city - are bound to tolerate the Pollution, unwillingly and are forced to obey the rules of Environment-Market and to become consumers until most were affected by dreadful illness such as cancer .The production and distribution of such product (negative value) in E-market are not determined in accordance with demand of potential consumers in E-Market and the consumption of this "byproduct" is not at the will of the consumer, who has no other alternative but to accept it .The neoclassical and neo liberal thinkers rejected to treat it as 'environmental product' (pollution and its unhealthy effect) or as a "commodity" of exchangeable value. However, in the countries where local environmental problems are considered as the most serious, environmental problems that perceived more dangerous for oneself and the health concerns relate typically to the local environmental problems (Tanskanen) are fails to see the innocent people in less polluting nation dies out of ESP Effect .The price created by ESP Effect in less polluting nations are not well under stood .Just as price in commodity market is determined at

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the point where demand and supply tally, in the given number of buyers, similarly the price of product in e market is determined when the social cost of pollution is equal to private cost of pollution It is shown below

The '**product'** is the "byproduct" of pollution-toxic and harm full product-- from ESP effect or SGP generated. This is an intruder in the production process, emerged without intention of producing it.., There is 'Consumers' in E-market as well, but it is existed in the form of victims who is entitled of no freedom of choice like monopoly, and are forced to accept, with no alternative, the existing condition of environment without any alternation of it, in a given time

Environmental thinker George Edd and Michal Fixes of England identified that Pollution of any type, whether water or air or whatever it may be is the one "product" which is to be exchanged in the market, either domestically or externally or both. Prof; Kuznets and RegnerCoarse were reluctant to see the implication of ESP effect in the formation of Environment Market .This model of conventional definition of environment is insufficient to prove the existence of e market and also fails to see the role of ESP Effect in the determination of pollution price. However, in environment market, these toxic substances are exchanged between various living and non-living organisms. The price, at which these elements are exchanged, is determined by (1) the quantity of substance exchanged (2) volume of adverse effect created by ESP Effect and (3) which country – whether less polluted or very less polluted nation under goes adverse impact of ESP Effect. The price of pollution is hyper sensitive if very less polluting nation receives damages by ESP Effect, .The price (the sacrifices in term of health deteriorate) goes upwards and determined at under equilibrium stage. This is because Price of pollution is not equal to SGP .But it is greater than this due to operation of ESP Effect .The price falls and came in to equilibrium with social cost if compensation for ESP Effect is received

## The Air Pollution Price Determination Process in E-Market

The price, in the E-market is the irrecoverable and permanent social loss occurred out of effects of Pollution either by ESP effect or by CEN or by both. The price is the social cost – the cost undergone by society, as a whole. The Health degradation and damage on environment is the determinant of the prices at which goods get exchanged between them. The E-market is the space in the environment where elements of definite value such as excess of Carbon dioxide, Carbon monoxide and other polluting gases are produced in and exchanged with C-market, without any "monetary price". The conductivity character of air and ESP Effect give us tools to open complex the interdependence of components for this market. The virus, bacteria, and fungi associated with diseases and vectors such as mosquitoes and rodents are became active with light increase in temperature and moisture (Dr.Drew Harvell of Cornell University) is the negative agents from pollution were stimulated by as ESP effect and transfer all the adverse to inhabitant(consumers).

This "price" in E-market moves upwards like prices in commodity market, as long as ESP Effect and SGP are in the operation. The price inflicted by ESP Effect vide ECN is be compensated .At the same time price obliged to receive by SGP is not compensatable .Instead they have to pay compensation to eachof victims nation in proportion to damages brought about by them. The price of pollution is the social loses, which is expressed in terms of degradation of health and value of environment due to E-value disequilibrium, penetrated by ESP effect and SGP and which results

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in the subsequent diminishing of the average working hours — due to persistent health problem — and withdrawal of labors from the Labour market along with permanent and irrevocable losses to environment. The 'prices' are determined by extent of divergence between Private Cost of Pollution and Social Cost of Pollution. The Cost of pollution is classified as Private Cost of Pollution (PCP) and Social Cost of Pollutions.( SCP). *PCP* is all the monetary cost incurred for reducing volume of Pollution released, at its source itself, in a given period.PCP does not comprises of adverse heath impact by ESP Effect as long as it undertake cost equal to cost imposed by them . AC piqué and Coarse PCP include only impact from SGP *.Social Cost of Pollution (SCP)* is a wider concept, intended to measure, long term damage to society as a whole and is non-recoupable and permanent loses, incapable to bring back at all, with human afford. This is the social loses, which is expressed in terms of degradation of health, due to E-value disequilibrium, and which results in the subsequent diminishing of the average working hours — due to persistent health problem — and withdrawal of labors from the Labour market, In e Market, the equity of SCP and PCP is rare to appears

The important question is who reduces a social cost? In free market economy, the social cost is determined by private cost because it falls in accordance with growth of Private Cost of Pollution (expense for reducing Pollution by indirect from). If heavy expenditure is incurred by private men, for reducing the Pollution particles released from their industries, it benefits the socially as a whole, and brings in reduction in diseases generated from Pollution. The problem, faced by developed nation is reluctances on the part of big businessmen to install Pollution Control Devices. In underdeveloped nation, even when, it does not pollute and damage E-value, the ESP effect and conductivity effect of nature, brings Pollution and produce same or more adverse effect of Pollutions that of developed nation., because of already prevailing unhealthy condition of people, invite disease more easy by either ESP effect or by SGP or of both . .

In order to equate social cost of Pollution with Social Benefit, the monetary compensation is not a real one, as long as, the definition of social cost include irrecoverable and irresistible loses. But is a kings way to solve ESP effect. The problem, faced by developed nation is reluctances on the part of Big businessmen to install Pollution Control Devices..(The issue is explained under the heading –'Policy Implications') Hence social cost of Pollution in less developed country cannot be reduced by private cost. How can we think of big corporate - creators of Pollution - of other developed nation bears the social cost of Pollution imposed by them. Hence, in least developed nation the social cost of Pollution can reduce by government investment. This social cost of Pollution, imposed on less developed nation by developed nation, cannot or never be possible to compensate from the help of developed nation who is responsible.

In least developed nation, the private cost of Pollution is weak instrument to control social cost of Pollution. These negative externalities penetrated—ESP Effect -- outside can push up the social cost of Pollution in the victim nation, much higher than what it would have been the SCP externalities generated within the nation. In less polluted nation SOP rise above PCP due to ESP affect .The volume of SOP goes up to extent of ESP effect.. Under such situation the equality between these two costs can be established by undertaking the private cost of Pollution partially or fully by Government fund. As long as private cost of Pollution are pushed to rise, either by Pollution Control Act or by providing subsidies to polluters in purchasing the devices for Pollution

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control or both, in developed nation, there is no doubt that social cost of Pollution tends to diminish. It shows that the costs undertaken, for extension of private cost of Pollution, will undoubtedly reduce social cost. The price in less polluted nation is determined at the point where PCP falls below SOP. This gap is important determinant of price. This gap is to be reduced maximum by inducing business men to install pollution control devices under support of subsided fund received from compensation for ESP Effect .The SCP, is "**under equilibrium**" as long as no compensation is received for artificial impose of ESP effect - This uncompensated cost can bring in equation with PCP only on receipt of compensation of ESP Effect. In developed and polluting nations, SCP is induced by SGP and it is always equal to PCP .This is because ESP Effect do not work due to operation of Zero Conductivity effect and the e value is in the 'equilibrium' .In less polluting nation, this under equilibrium state of SOP and PCP is possible to remove and brings in ''equilibrium" accepting compensation for ESP Effect and distributing it as subsidies to purchase it

## **Elimination of under Equilibrium**

The elimination of under equilibrium of SCP and PCP that undergone out of ESP effect is main part here .This is possible to large extent by paying compensation to victims nations . The objective, of this portion is to prove the role of 'Compensation for ESP effect' in correcting and balancing Social Cost of Pollution of 'victim nation', — the nations that suffers from ESP effect and brings price of pollution of less polluting nation to the level that is tolerable for them. It is temporary solution and acquires importance when it stimulate TPNs to cut down emission level. For this, pollution tax within the mother nation is insufficient tools. This tax is designed to compact increasing cost on human behavior to our natural environment (Groosman). But it never tell whose anti-environmental behavior – whether on motherland polluter or on polluters outside the mother nation — should be taxed. Such definition misleads us from real problem and makes feel that all nations are equally responsible contributions for pollution .The justification of this compensation is simple. The benefit of production is never shares, between nations, on which cost imposed and cost is significantly larger than the nation that caused it. The ESP effect, does not work, to share the benefit and shares only the disadvantage of Pollution between less polluted nations. The tax on ESP Effect solves this issue.

Nobel Prize laureate Ronald Coase and AC Piqué, try to equalize Social Cost and Social Benefit of pollution generated by pollution within the mother land, ignoring the aspect of Social Cost Pollution (SCP) generated out of ESP effect. In such disequilibrium brought about by ESP Effect, the SCP and SBP is never tally and SCP triggers upwards with every impact of ESP effect. Such disequilibrium develops as long as no compensation is paid to victim nations in proportion social cost undergone by E SP effect. The Piqué's concept of internalization ---the processes of investing fund obtained from tax for business which does not directly or indirectly leads to further emission of surplus Pollution-- to equalize SOP and SMP is self-defeating and breakup the whole objective of tax and leads to negative internalization of Pollution. This also ignored ESP Effect induced Social cost <u>Coase</u> ignored poor victims of other nations affected by ESP effect –third party- who has no bargaining strength. The tax for ESP effect is the compensation paid by polluter nation, to the least polluted nation in proportion to amount gained by polluting nation at the cost of less polluting nation situated as adjacent boundary or on distant nations, and for the damages created by ESP effect on the Nation's Life Expectancy and Mortality Rate, etc.

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## **Determination of compensation Rate for ESP effect**

The estimation of Tax on ESP Effect based on the percentage of Global Emission of co2 of the Nation under concern can however, remove the disadvantages of estimating tax based on per capita Emission and if per capita emission method is accepted, the Pollution seem to fall, according to growth of population and lead to misleading conclusion, concealing fact. The Zero Conductivity Effect of Pollution, of polluting countries — a gift of nature — can protect nation from imminent danger of ESP Effect. A part of the per capita income of developed nation that is obtained at the cost of less polluted nation, is belonged to such Nations and need to disburse to victim nation, as compensation for the adverse effect on environment and abstemious through food. Let us now estimate, what percentage of per capita income of China is belonged to rest of the Nations for unloading the adverse effect occurred from ESP effects. . In order to estimate Tax on ESP effect, we need to calculate what percentage of compensation is to be paid to each victim Nations, For this, we should take into consideration the parameters as shown. (1) The percentage of Global Emission of CO2 by nation that liable to pay compensation. (2) Per capita income of the nation on whom tax falls. (3) Difference between Global percentage of CO2 emission of most polluting nation and least polluting nation (4). Difference in per capita income of polluting Nation, with those of Average Per capita Income of Nation that receives compensation, ... USA never entitled to shares compensation to China that pollute more than former. Likewise, India never compensates for USA, China, and E U Nations as long as rate of Pollution from India is small in relation to them. If we calculate Tax on ESP effect of India, first of all, we have to deduct, total number of all other nations that emit Pollution rate above that of Pollution rate of India, from the total number of nations including 0% Pollution emitting nations like Maldives, Afghanistan etc. For example, if we need to calculate tax on ESP effect on Mexico, then we have to estimate world Rank of Mexico in respect of rate of co2 emission. As seen in the table, Mexico stands at 12th rank in respect of emission rate, and these figures must deduct from total number of nations in the rank list prepared on the basis of rate of Pollution. (214-12= 202.). The per capita income of Mexico ( \$ 15340) should be divided by total number of nations with whom compensation is to be paid.( 15350/202=). For example, how many in per thousand of people, , (rate of per capita income) in USA have per capita income worth of \$48442. Amazingly, it is found that less than 30 people in every club of hundred people have income equals to or more than per capita income of \$48442 of USA. However, in China, more than 900 people in every thousands of people have income equal to or greater than \$ 8442, which makes clear that social value of per capita income of China, is larger than USA as it covers large number of people per thousand.. In the other case, let us take reverse of it, i.e. USA has per capita income of\$ 8442. It is found that number of people per thousand having income worth 8442 in the thousand people club of USA is107/1000 which is very much less than that of China.

We know that per capita income of USA is \$ 48442. The averages of per capita income of other polluting nations except China and USA are, assumed conveniently as \$, 8000. The difference is \$ 40442. ... Certain portion of it is entitled for distribution as compensation. 40442 /214-2(minus USA and China) =188.98. Each nation has right to receive compensation worth of \$ 188.98 from per capita income if all Pollution of co2 is released from this nation alone. However, thing are different and every nation contribute Pollution according to pattern of production adopted. USA emits 18.27% of global emission of co2 and all other 212 nations (except USA and China) emit (100 less 23.53+18.27=41.8) =58.2% of co2. Hence 18.27% of 188.98= \$34.52 from every per

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capita income of \$ 40442 comes under divisible pool to distribute. For all nations, the total amount is 34.52X 222= 7664.91. In short \$76 65.is owes to the rest of the world per capita income.

Let us again assume, that the percentage of global emission of co2 from China changed from 23.53% to and 7%. From every of its per capita income, china has to pay \$ 8442/213=\$ 39.63 as compensation for ESP effect and this is the case if China is only polluter of the world. As long as we are holding the assumption that there exist weak relationship between per capita income and Pollution rate, there is no need to take difference average per capita income of recipient Nations before estimating tax on ESP effect. If Pollution rate changes to 7%, the net compensation to ESP effect changes to \$2.77(7% of \$39.63). The total contribution from each per capita income status is 2.77x223 = & 617.71 Now we can take another situation. Assume that the per capita income of distributing and recipient nation of tax on ESP effect as \$ 45000 and \$30000 respectively and the difference between per capita income of polluting (Distributing) Nation and least polluting (Recipient) Nation as \$15000/=and the percentage of emission of emission as four among 214 nations. Hence compensation of ESP effect, therefore, calculated as \$ 15000/ 214= \$ 70 if this nation makes 100% of global Pollution. Assuming this nation makes only 4% of Pollution, the contribution for ESP effect is 4% of 70=2.8x 214= 599. This means that \$ 599 is part of as compensation for ESP effect from every \$ 15000 (Difference between per capita income of recipient and distributor nation) of per capita income. The present system of Pollution tax is estimating tax according to unit of pollution emitted by industries working in the demotic nation, in a given time, rather than unit of Pollution emitted by other polluting nations and damages imposed on us, by such polluting nations. This system does not satisfy condition for correcting negative externalities created by ESP Effect. As long as, internal negative externalities are creating equivalent amount positive externalities,

China shares 23.53% of global emission of co2. The per capita income of china is to be divided by total number of Nation (214) excluding concerned polluting nation, with whom tax for compensation should share, i.e.8442/214-1=39.63. The whole of this portion of per capita income is not entitled to distribute to rest of nations for infliction on environment vide ESP effect. Only this portion of per capita income can belong to rest of nations, if china is only the polluting nation. However, this is not the case. China is the largest contributor (23.33%) of co2 among rest of 213 Nations. Hence 23.33% of 39.63=\$ 9.24 is the portion of per capita income that comes under divisible pool. This means that China is s obliged to distribute \$ 9.24 to all victims nation, out of per capita income of \$8442. **This is \$9.24x population of china**. This is total contribution of China towards ESP effect on rest of the world is equal to amount calculated as compensation from each portion of per capita income multiplied by population i.e. 9.24-x population of China in the given period.

Likewise, we can calculate tax rate on ESP effect on United Kingdom emitting 1.7% of global emission of co2 at the 10<sup>th</sup> Rank and having per capita income of \$ 36551. For this the per capita income of UK is to be divided by the number of Nations, between which its compensation is to be distributed and no need to compensate other nine nation above it that emit co2 more than UK. This is based on the assumption that Pollution dust travels to downward stage (from most polluted to less polluted) and not in reverse stage i.e. 36551/214-10=36551/204=179.17. This whole part of per capita income is not entitled for compensation and taken into account per capita income, which

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would have obtained if not Pollution-targeted industries is not launched. In order to obtain this, we have to take the difference between average per capita income of other polluting nations below it and per capita income of UK. Assume that average per capita income of other less polluting nation is \$8500. The difference is 36551- 8500= \$28051. We impose Tax on ESP Effect on this part of per capita income which is acquired by releasing Pollution to other nation 28051/204=137.50. This part is not wholly belonged to rest of world. Only 1.70% of percapita income is belonged to pool of compensation.ie 1.70% of 137.50=.2.33 and contribution by UK can be obtained after multiplying it with population.

## **Policy Implication**

The fixation of price of PCD and amount of Pollution Tax are important determinant of pollution emission..The economic policy should be designed in such a way that polluter would install PCD, . The tradeoff between accepting pollution tax and install PCD would be a issue only when significant difference exist between them and if difference is not significant, polluter bear difference by himself The policy should be designed in such a way that make significant difference. Coase's assumption of Trade off is holding true, only when, polluter strongly prefers either of them and do not accept both of them simultaneously .In the Western Nation, contrary to our belief (Coase and Piqué), that polluter accept, both of them simultaneously - accept Pollution choice and Pollution tax altogether and move to Non – Trade off stage (Negative trade off stage).In westerns country both pollution and pollution tax is increasing rejecting Coarse hypothesis

The policy of any government is the formulation price, that create 'Positive Trade Off' (PTO) situation and generate incentive for polluter to move into tradeoff stage (assumed by Corse and Piqué) and accept either of them, without accepting both and choose directly, the option of tax without any hesitation, reverting any chance of Negative Trade Off. Pushing up the price of PCD significantly above the amount of pollution tax is self defeating. The reduction of PCD very much below the Pollution tax is not possible as long as cost of production cannot reduce below minimum level. Subsidies to both ends- producers and buyers of PCD-- help, to bring about significant difference between the two options --is Kingsway to reach our goal . Pushing price of PCD without help of subsidies is foolish and it is equal to killing the goose that lays golden eggs. Because artificial hike in price of PCD, would lead in Negative Trade Off situation and leads in favor of acceptance Pollution instead of installing PCD option . Thus only solution is deliberate reduction of price of PCD, at minimum possible level vide distribution of "Green Fund"(fund for subsidy collected from levying tax on the good that directly or indirectly promote Pollution and transfers to fund known as green fund) ...

...The intermediary role of Pollution tax, between producers of Pollution and victims of Pollution, neither analyzed nor interpreted... The great obstacles for polluters, to travel through' trade offstage' is relates to expanding cost of PCD and increasing Pollution tax, which makes no significant difference. The social cost of Pollution can, therefore be able to keep at minimum acceptable level if subsidies are distributed both to polluters and producers of PCD in such a way that makes them to obtain production cost of PCD at minimum level and polluter to purchase, ... The allocation of 'Green Fund' to both ends – producers and purchasers of PCD – brings about a positive trade off situation, using 'Principle of Subsidies in both ends' –polluter to accept PCD at least price and producers to produce at least cost on subsidies. As long as maximum price of PCD

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is slashed down vide the enhancement of subsidies to manufacturers of PCD and purchasers of PCD, the polluter, is tend to accept option of PCD that would maximize benefit out of trade off situation.

## CONCLUSION

To sum, uncontrolled growth of air pollution transform healthy men in to sick and wealth men in to debt trap and employed ones in to unemployed house owner in to rent payee and homeless, and above all it cause to fall more and more population in to pauper at growing medical cost is price of pollution. In short surplus pollution puts entire inhabitant of the world to live in sick for no cause of them leading to spend everything earned on illness caused by ESP effect. Our task will not end till up root the deadly strategy of USA and China in pushing toxic pollution in to developing world Pollution is crime against generation of years to come, whose demand for pure air to breathe is denied. It is high time for the reunion of nations, irrespective economic system which follow, against this massive killing by one or two nations business. The tax on ESP Effects, are not at all a strategy for a compensation of loss — which is unable to compensate in real terms — but rather a Kingsway for reverse thinking

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