Emission trading: Blessing for polluters?

The whole trading scheme actually represents a means to shift responsibility of taking action for tackling climate change to Southern countries and is aimed at the wrong target. It is not directed at reorganising industrial societies' energy, transport and housing systems so that they don't need coal, oil and gas to burn.

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THE issue of climate change and its consequences are no more limited to a regional boundary -- it's global now. A wide variety of policies and measures are available to governments to limit or reduce greenhouse gas emissions. Besides regulations and standards, there is an increased focus on pollution as a social and economic issue. Recently economists have focused on market-based forms of guideline as a possible alternative to command and control Instruments. As per this school of thought, market-based instruments -- such as pollution charges, subsidies, tradable permits, and some types of information programmes can encourage firms or individuals to undertake pollution control efforts that are in their own interests and that collectively meet policy goals.

Carbon Trading Scheme is one form of limiting access to a common property resource by issuing usage rights. It is the process of buying and selling carbon credits. National Allocation Plan (NAP) sets out the total number of allowances to be issued and distributed to national installations. Large companies or organisations are assigned a quota of carbon that they are allowed to emit. If a company's emissions are less than its quota then it can sell credits; if emissions are more than it, then the company will need to buy carbon credits.

Carbon trading or more precisely emission trading is a complex system which sets itself a simple goal: to make it cheaper for companies and governments to meet emissions reduction targets. If examined closely, then it becomes perceptible, an emission trading is designed in such a way that the targets can generally be met without actual reductions taking place. A combination of industrial lobbying efforts and measurement difficulties have ensured that the pollution rights granted to private firms within cap and trade schemes are in many cases more generous than the polluters need to cover their existing level of emissions. The surplus of permits can then be sold to other polluters so that they too might avoid reducing their greenhouse gas emissions. Member States can auction up to 5% of allowances for Phase-1 (Y2005~Y2007) of EU ETS (European Union Emission Trading Scheme), up to 10% for Phase-2 (Y2008~Y2012). In practice, the scheme has failed to incentivize emissions reduction.

It is evident that, the vast majority of permits have been handed out for free (a practice known as 'grandfathering') in the EU ETS ,and the same is true for other cap and trade schemes. The number of permits awarded is calculated according to existing levels of pollution, which means that those who have polluted most in the past are rewarded with the greatest subsidy. This free gift of pollution rights to some of the worst industrial polluters amounts to one of the largest projects for the creation and regressive distribution of property rights in history.

This multibillion dollar scheme's basic premise is that polluters can pay someone else to clean up their mess. In the process, it has rewarded polluters for continued pollution while at the same time causing social and environmental injustice. The likely consequences of climate change vary from region to region, but include widespread drought, desertification, flooding and glacial melt.

Carbon trading has created a system whereby different greenhouse gases are treated as equivalent and quantifiable "things" or "commodity" opening them up to the possibility of exchange. An emissions cut in one place becomes "equivalent" to, and thus exchangeable with, a cut or a compensatory measure elsewhere. At first glance, this may seem uncontroversial. As the World Bank puts it, "greenhouse gases mix uniformly in the atmosphere, which makes it possible to reduce carbon emissions at any point on Earth and have the same effect". Climate change is a global problem rather than a local one, so it should not matter whether these reductions are made in Bangladesh or Bolivia.

The whole trading scheme actually represents a means to shift responsibility of taking action for tackling climate change to Southern countries and is aimed at the wrong target. It is not directed at reorganising industrial societies' energy, transport and housing systems -- starting today -- so that they don't need coal, oil and gas to burn. It is not contributing to the de-industrialisation of agriculture or the protection of forests through the recognition of local and Indigenous peoples' tenure rights or food sovereignty. Instead, it is organized around keeping the wheels on the fossil fuel industry for as long as possible. It sets the scale of the commitments to be made, but says little about how that will be achieved in practice.

As the saying goes -- a third failure starts to look like a consistent trend. EU's Emissions Trading Scheme is not living up to its billing as a means to reduce carbon emissions. In Phase-1 of the scheme, too many permits were in circulation as a result of over-generous allocations across the board. This problem has been repeated in the Phase-2, with the ability to trade emissions within the EU for offset credits from outside the trading bloc the main means of over-allocation. In the Phase-3 (Y2013~Y2017) of the EU ETS, some of these loopholes may be closed, but the increasing complexity and international linking of the European with other carbon markets means that others will be opened -- allowing emissions 'reduction' permits to continue circulating without a significant need actually to reduce emissions domestically.

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Sustainable cities: How far away are we from?

In the coming years more people will be living in the cities world wide. It is the right time to develop sufficient infrastructures including transport, utility services and housing for people migrating to urban areas while ensuring their sustainability-- environmentally.

MAHFUJUR RAHMAN

CITIES are considered the cradle of civilisation. Cities have been the centres of education, rule and business throughout the human history. People of cities are usually more conscious and progressive due to exposure to refined knowledge and closeness to rulers. They are 'elite' compared to the rural people. Moreover, employment opportunities and comfort of living attract people from the rural areas where they are found to be pressed by various problems like river erosion and unemployment.

How cities are founded: Cities were founded by people where communication systems were easy to develop, near coast or beside a river, for surface or air communication was not developed then. Now planned cities are incepted in a place where there is plenty of land suitable for construction of houses and other infrastructures. But in both the cases a site was or is selected for human settlement considering some factors such as fertility of hinter-land, natural communication facilities, safety from various hazards like flooding, cyclone. However, advancement in science and technology has made it possible to build a town or city anywhere on the earth, only requirement is sufficient land.

Key-conditions: In a city the population density is usually higher than in the surrounding areas. Urban area is demarcated by land use pattern. According to the Urban Development Directorate (UDD) of Bangladesh, the land area of a locality can be called urban if more than 80% of it is used in non-agricultural purposes. Industrial zones are situated within the periphery of big cities. Offices of business and governments are located in cities. Since population density is very high in urban areas people suffer from density related hazards in a city. Slums with poor sanitation condition and scarce supply of pure drinking water, unhygienic disposal of solid waste, discharge of industrial waste in water bodies are some of the problems. People living in a city are more exposed to unwanted sounds and public health is also more intensely hampered by air pollution.

Urbanization and the case of Dhaka: With the passage of time more people are going to live in the urban complexes world wide. By 2030, towns and cities will be home to almost five billion people. The urban population of Africa and Asia will double in less than a generation.

Dhaka's metropolitan area now has a population of some 12 million. Dhaka is projected to be the world's fourth most populous city by 2020 with 22 million inhabitants. With the expansion of the urbanized area the greening process has to be considered, while the green spaces in the old, intermediate and new towns are under great pressure.

Salient features

High population density: Urban complexes are manifested by highly dense population living in a small land area. Because of this crowding, the exposure of people to hazards is extreme. The intensity of destruction caused by an earthquake surpasses the destruction to rural area. The incidence of water borne diseases in an event of flooding is several times more than in rural areas.

Rapidly changing landscape: The urban areas in the developing countries are engulfing natural land at the maximum rate in the world. The expansion of cities is causing destruction to forestland, filling of wetlands and loss of agricultural land. The situation in the developing countries like Bangladesh is some sort of extreme in this regard. Cities in Bangladesh are growing at a tremendous speed.

Huge waste generation: The urban areas produce huge amount of waste on a daily basis that may become un equally huge problem for the city if not managed properly. The waste comes from industrial, household and official sources and ranges from innocuous organic to synthetic polymeric to radioactive waste. Another source of waste in a growing city is the construction sites that generate excavated earth, dust and debris in huge quantities.

Production and consumption of industrial goods: The conspicuous feature in the lifestyle of urban people is the extensive use of industry produced goods. This, however, generates employment and income to the benefit of economy.

Shrinking green space and dwindling biodiversity: The greenery decreases with the progress of urbanization. People forget or tend to ignore the importance of open space and trees. Many people who think about the importance of green spaces and want to have homestead garden also cannot manage enough money to buy so much land. The government offices and government quarters only have such provisions and must keep it up build new houses and offices sparing considerable open and green space.

Socioeconomic life: Importance of any thing in a city is considered according to the economic utility or monetary value it can provide to people. Life in urban area is not generally blissful. The landless people who are forced to come to the city for earning livelihood always face extreme conditions. Even the middle class people are compelled to work a lot if they want to maintain at least a modest standard of life in city. Over all the urban area is a place of competition where candidates are increasing but resources are scarce. As a result people except those of the high society are always busy to earn their livelihood or striving for survival. They have no time to think about its environmental condition.

Vertical growth: The land area is limited on this planet. So, urban growth also encroaches upon land previously used as agricultural field or for other purposes. Mainly for scarcity of land and also many other reasons horizontal expansion of a city is restrained. The city planners must think about the vertical growth, constructing multistoried building.

Urban environment

Characteristics: Urban environment is the combination of built environment and natural environment.

An urban area can encounter the following geographical features: Rivers, mountains, forest, desert, plain land and coast.

Importance of natural features:

Wetland: to be used as lagoon to treat liquid waste, ground water recharge

Forest and vegetation: for capturing air pollutants and water-shed management, ground water recharge

Open spaces: as ground for material recycling of organic waste, ground water recharge

Mountain and hills: as source of water , conservation of mountain ecosystem, ground water recharge

River : source of municipal and industrial water and sink for waste water

Urban infrastructure:

Structures: airport, seaport, bus terminal and railway stations

Transportation: roads and highways, bridges and culverts,

Utilities: water, gas and electricity supply , telephone, sewerage system and waste management

Pressure on environment: Population growth and horizontal expansion both create pressure on environment with pollution effect and farmland enchroachment.

Zones of a sustainable city: Ideally there are -- residential area, government and commercial complexes, industrial area, hospital, parks, educational and research institutions, markets, sporting areas and some maintained wilderness

Origin of crisis: rapid growth of areas, high density of population, unplanned infrastructure development, rapid and indiscriminate industrialisation are supposed to be the main reasons of urban crises.

Challenges: waste management, waste water treatment process, air pollution control, biodiversity loss recovery etc are some challenges the city dwellers face.

Major problem areas: Trouble shooting must be constant in the following areas for sustainability.

- Transport: intra-city and inter-city
- Utility services
- Sewerage system
- Public facilities: Parks ,lakes ,markets and hospitals
- Waste management

Environmental banes: These cannot be turned into boon but should be contained at a sustainable level.

- Ground water depletion and pollution
- Pollution of surface water
- Solid waste
- Sound pollution
- Air pollution
- Radiation hazard
- Pressure on green and open spaces
- Green house gas emission
- Deterioration of sanitation and hygiene

Some options for a sustainable city can be:

- Compact settlement
- Mixed land use
- Production of renewable energy within the urban area
- Maintaining water quality, food safety and public health
- Solid waste management
- Air quality management
- Controlling noise pollution

Conclusion

We need sustainable cities worldwide to achieve the sustainability of the planet itself. Because it is the cities which are responsible for the human induced global warming and climate change. In the coming years more people will be living in the cities world wide. It is the right time to develop sufficient infrastructures including transport, utility services and housing for people migrating to urban areas while ensuring their sustainability-- environmentally. And in such efforts developing countries need both fund and technological assistance from their developed counterparts.

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The recent water and power crisis: Is El Niño to be blamed partly?

Power problem in Bangladesh is nothing new and, certainly, even without El Niño Bangladesh has already suffered the severe effects of power shortage. But has the recent El Niño made the problem of power crisis worse? Concerned agencies of Bangladesh should strive to find the answer how much influence the on-going dry spell of El Nino has on the water and power crisis.

DR. MD. RASHED CHOWDHURY

LET me start with a classic example of Venezuela--the country officially called the Bolivarian Republic of Venezuela. This is a tropical country on the northern coast of South America. The republic is a former Spanish colony that won its independence in 1821. Like Bangladesh, Venezuela is in the midst of a genuine power and water crisis. There may not be a clear cut answer to this question "What is causing Venezuela's energy crisis", and different people provide differing interpretations.

President Hugo Chávez's critics say that the government has neglected the power grid and failed to invest in hydrology systems and aqueducts in order to expand power production and satisfy increased consumption. Also pointing the finger at weather changes, President Chávez said "It's El Niño," (*a periodic phenomenon in which warming in the Pacific gives rise to unusual weather patterns*) partly to be blamed for this recent crunch. The El Niño is blamed to have resulted in a lack of rainfall and the cause of water shortages. These shortages in turn have starved Venezuela's hydroelectric dams which provide approximately three quarters of the nation's electricity.

President Hugo Chávez has been in power for more than ten years, during which time he has deflected numerous electoral challenges, a recall effort, a coup d'etat and even an oil lock out. A politically adroit statesman, he has demonstrated enormous staying power throughout all these political crises. Yet, Chávez's leadership was finally threatened by the devastating El Niño-linked drought in recent years, when the government has been forced to undertake conservation measures for water and electricity. The *President finally urged citizens to cut back showering time as the country's electric and water supply problems mount.* He also passionately encouraged Venezuelans to quell personal consumption by taking shorter showers, saying that wasting electricity or water "is a crime."

Throughout the Pacific Basin, El Niño is normally linked with extreme weather like droughts and floods. While the recent El Niño has proven enormously dislocating for Venezuela, it's not the first time that the Andean nation has been hit by such weather phenomenon: indeed, during the 1997-98 El Niño the country was struck by drought and the authorities were obliged to ration power.

I have cited the Venezuelan experience as because I see there is a similarity about the nature of problems Bangladesh is facing now. With the El Nino dry spell there is a shortage of water to generate the rated capacity of the power stations. So, the dry spells is seriously affecting both the water and power sectors. We are aware about the importance of electricity and water in a civilized society. In fact, one of the parameters to measure whether the economy of a particular country is moving forward is the amount of electricity that it consumes. The importance of water not merely for human consumption but for industrial use is also admitted.

Power problem in Bangladesh is nothing new and, certainly, even without El Niño Bangladesh has already suffered the severe effects of power shortage. So, there is no question about it! What I want to raise here is that: has the recent El Niño made the problem of power crisis worse? Concerned agencies of Bangladesh should strive to find the answer how much influence the on-going dry spell of El Nino has on the water and power crisis in Bangladesh for which the country is experiencing its worst suffering in recent decades. While further research is needed, climate change could make El Nino more intense and frequent; the public officials in charge of forecasting, planning and constructing new water and power plants should also think about the role of this periodic El Nino/La Nina event in implementing any future projects.

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