

Towards a Global Compact for Managing Climate Change



Introduction

The year 2007 witnessed a major surge in interest in controlling the damage that can be done to the planet due to the accumulation of greenhouse gases (GHGs) in the atmosphere. In February 2007, IPCC report¹ came out presenting the growing consensus among climate scientists about the devastating effects of human-induced climate change, in particular for low income regions and low income people of the world. Al Gore, the former Vice-President of the U.S. in his powerful movie, *An Inconvenient Truth* which won two Oscars, demonstrated in a graphic manner the high costs of climate change for the world including the developed countries. Since then under his leadership the global *Live Earth Concerts* around the globe have been raising consciousness of the global community about the dangers of climate change. On June 7, the Communiqué issued by G8 Summit² devoted a considerable amount of attention to the issue of climate change and strategies for reducing greenhouse gas emissions. The G5, India, China, Brazil, South Africa and Mexico, also focused on climate change in their joint statement issued on the sidelines of the G8 Summit at Heiligendamm in Germany. The 2007 Nobel Peace Prize to Al Gore and IPCC has further raised the public profile on climate change issues.

There has also been work on the economics of climate change. The Stern Review³ published in October 2006 and publicized in 2007 sought to demonstrate that about 1 per cent of GDP invested in controlling greenhouse gas emissions can save 5-20 per cent of GDP that could be lost

by 2050 due to climate change. Stern's use of a near zero inter-generational discount rate has been criticized by a number of economists (Nordhaus/Partha Dasgupta) on conceptual grounds but even if we accept his logic, the big fact remains that he refused to extend the same logic intra-generationally. Is this because this leads to implicit recognition of an equal per-capita entitlements paradigm? There are also serious concerns regarding the costs of tackling climate change, which Stern has himself been revising upwards since his Review first appeared.

However, while the year 2007 began with a bang on climate change discussions, it ended with a whimper on climate change agreements. The heated and even tear-jerking debates in Bali Conference in December 2007 produced no real agreement on a program of managing climate change. All it produced was a road map for further discussion leading up to Copenhagen Meeting in 2009 and agreement for *consideration* of enhanced national/international action on mitigation, adaptation, technology development and transfer and provision of financial resources and financial and technical support and provision of new and additional resources, including official and concessional funding for developing countries. In order to make effective progress towards an agreement in Copenhagen in 2009, it is necessary to be frank about the factors that are inhibiting progress towards agreement in this area. In our assessment, among these factors are the following.

- a. For climate change what matters is the stock (and not current flow) of accumulated greenhouse gases (GHGs) in the atmosphere.

RIS Policy Briefs are prepared to communicate results of RIS research on specific policy issues to the policy makers.

This Policy Brief has been prepared by Dr. Ramgopal Agarwala, Senior Adviser, RIS under the overall guidance of Dr. Nagesh Kumar, Director-General, RIS with contributions from Dr. K. Ravi Srinivas, Associate Fellow, RIS and Ms. Rupa Subramanya, Research Analyst, RIS.

Yet there is inadequate acceptance in the developed countries of the historical responsibilities for the current stock of GHG and the implications thereof for funding adaptation and mitigation programs. The concept of carbon debt and the debt servicing responsibility for that debt must be fully accepted. The present value of such debt needs to be quantified and the mechanism for servicing that debt explored. The wording in the Bali Action Plan on mitigation in the North leaves one with the distinct impression that the North is, in-fact, trying to walk away from its commitments and obligations.

- b. The developed countries must accept that there cannot be an international apartheid in lifestyles. If the western lifestyle is not replicable for the world as a whole, it must be modified in both the developed and developing countries.
- c. There is suspicion in the South that the economic rise of the South is not acceptable to the North because that will end their global dominance and the climate change discussions may be one instrument for slowing down of the rise of the South. This must be allayed by the North. Talk of competitiveness and threats of use of protective measures does not contribute to such an allaying of apprehensions of the South.
- d. The present discussions of the impact climate change are too much concentrated on the very long-term impact and on impact on global GDP. It is difficult to be terribly worried about what may happen in a hundred years given all the uncertainties, including those of technological progress. As shown by IMF (WEO 2007) raising the pure rate of time preference from 0.1 to a still modest 1.5 reduces the range of expected damage costs from 5–20 percent to 1.4–6 percent of global consumption. Such losses can occur from current financial crisis of the US alone. In many developing countries, policy reforms can add several per cent points of GDP. Something more convincing is needed. Among the possibilities are:
 - i. Demonstration that even though overall effects may not be large, climate change can wipe out livelihood of millions of people: it could be equivalent to X number of Tsunamis every year. Utter disaster even for 2 per cent of the world population may involve livelihood of 100-200 million people, more than the number affected by all the disasters of

the twentieth century including the World Wars.

- ii. Effects of global warming work in tandem with other effects which are operational in short and medium term. For example, the risks of car population explosion come in the form of pollution and congestion in the near term. Acid rain due to coal burning in China is a problem now. Energy saving is good for energy security now apart from its climate change effects. The discussion of effects of climate change must put more emphasis on near and associated adverse effects of carbon emission than is done currently.
- iii. The nature of catastrophic changes such as change of monsoon pattern in South Asia or change of gulf stream in Europe need to be elaborated by the researchers in the affected countries and publicized separately rather than being a footnote in a thick report.

Necessary Criteria for a Credible Global Compact

In the light of the above discussion we would define five criteria that have to be satisfied by a credible global compact on climate change:

- First, it has to be comprehensive. Results of actions of developed countries for over a year mean that adverse impacts of climate change will be vested on all of us, especially affecting developing countries in a disproportionate manner even though they are not responsible. Adaptation, therefore, needs to be given equal importance along with mitigation. It is furthermore important that the development needs of developing countries are taken into account.
- Second, it has to be equitable. Any hint of a counterpart of Non-Proliferation Treaty where the past and present high levels of emissions become a basis for future entitlements to high levels of emissions will jeopardize a global compact. It is clear that on ethical grounds, any concept of intra-generational and inter-generational equity will focus on emission rights on a per capita basis. The provisions and principles of the UNFCCC need to be fully respected and the principle of common but differentiated responsibilities not sought to be diluted in any manner.
- Third, the negotiations for setting of a global stabilization will have to be realistic. A credible program should also specify the

¹ "Climate Change 2007: The Physical Science Basis", the Fourth Assessment (AR4), IPCC, February 2007.

² Growth and Responsibility in the World Economy", Summit Declaration (7 June 2007), G8 Summit 2007, Heiligendamm

³ The Stern Review: The Economics of Climate Change, ..2006.

mechanism of incentives, technology development and dissemination and resource mobilization that can deliver on the agreed targets.

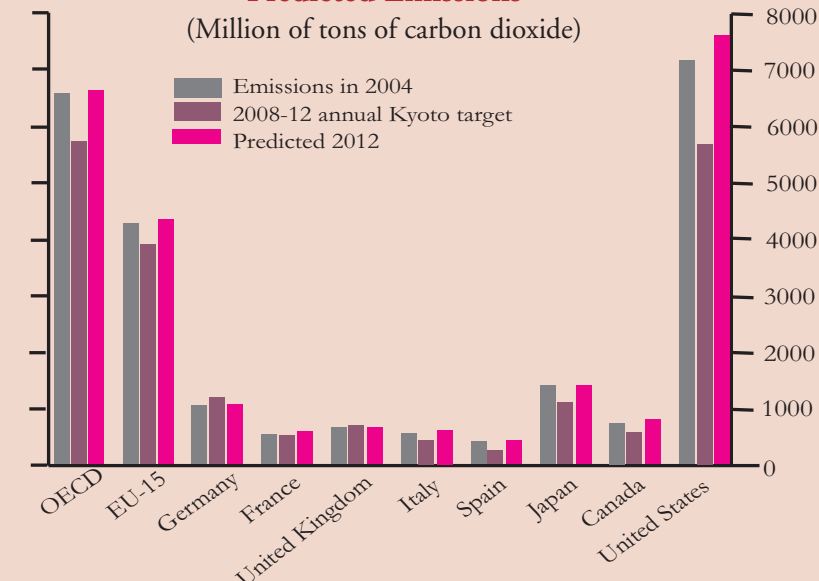
- Fourth the program has to develop an institutional mechanism for effective implementation. The system of compliance of developed country GHG reductions and their enabling support for mitigation actions by developing countries should be measurable and verifiable. Developing countries should measure, verify and then report such enabled and supported mitigation action.

Trends on CO2 Emissions under Present Agreements

At present the Kyoto Protocol (KP) is the main international mechanism for managing GHG reductions. But the progress in CO2 reduction under KP has been less than satisfactory. Between 1990 and 2003, emission of CO2 (a principal GHG) increased by 18.9 per cent shared almost equally between the developed and developing countries. What is surprising is that carbon intensity of GDP declined more sharply in developing countries (28.5 per cent) than in high income countries (12.59 per cent). Even more surprising is the fact that CO2 emission on a per capita basis, already relatively high in developed countries further increased by 8.5 per cent between 1990 and 2003 while it declined marginally by 1 per cent in developing countries. Clearly, despite all the hype about climate change in developed countries, there is a retrogression rather than progress in reducing their carbon footprints in these countries.

On these trends, the target of reducing CO2 emission between 1990 and 2012 for signatories of Kyoto Protocol (KP) is unlikely to be realized. (See Figure 1 reproduced from IMF WEO 2007).

Figure: Greenhouse Gas Emissions, Kyoto Targets and Predicted Emissions



Sources: Capoor and Ambrosi (2007); and International Energy Agency (2006).

What needs to be done for Managing Climate Change

Defining Targets for CO2 Emissions that are Comprehensive and Equitable

As mentioned above, we believe that emission targets that are comprehensive and equitable should be defined on a per capita basis for the world as a whole.

Table 2 works the implications of G8 target of emissions by 2050 on a per capita basis. It suggests that to achieve that target of 50 per cent reduction mentioned in G8 communiqué, the developed countries will have to reduce their per capita emissions by 90 per cent from the level in 2003, while the developing countries will have to reduce theirs by 40 per cent from their already low levels. Such targets do not seem to be realistic. The target of 50 per cent reduction in carbon

Table 1: Trends in CO2 emission, 1990-2003

	1990	2003	% change 1990-2003
1. CO2 emissions (billion tons) World	22.50	26.8	18.9%
High income	10.65	12.74	19.59%
Low & middle income	10.66	12.6	18.68%
2. CO2 emissions (kg per 2000 PPP \$ of GDP) World	0.628	0.507	-19.24%
High income	0.522	0.456	-12.59%
Low & middle income	0.801	0.572	-28.52%
3. CO2 emissions (metric tons per capita) World	4.3	4.3	0
High income	11.79	12.79	8.49%
Low & middle income	2.41	2.39	-0.80%

Source: WDI, World Bank, 2007.

Table 2: CO2 Emissions (billion tons), 2003 and 2050

	2003 total emission (billion tons)	2003 emission per capita (tons)	2050 total emission (billion tons) with		Population (billion) 2050	CO2 emission per capita in 2050 with	
			50% reduction	stabilization at 2003 level (with equality in per capita emission).		50% reduction in total emissions from 2003 level	stabilization in total emissions at 2003 level
High income countries	12.74	12.79	-	3.44 (-73%)	1.25	1.45	2.75
Developing countries	12.65	2.39	-	21.86(73%)	7.95	1.45	2.75
World	25.39	4.30	12.70	25.39	9.2	1.45	2.75

Note: Figures in parentheses are changes between 2003 and 2050.

Source: WDI, 2007, World Bank, UN Population Projections and author estimates.

emissions by 2050 is gaining currency but that seems to be of questionable validity.⁴

An alternative target could be stabilization of CO2 emissions at 2003 level by 2050, with a possible target of 50 per cent reduction by 2100.

⁵ This will mean reduction in per capita emission of developed countries by about 80 per cent by 2050 and this will allow the developing countries an increase in per capita emission by about 20 per cent. For countries like India, whose per capita emission in 2003 was only 1.20 ton, this will allow an increase in emission rights by more than 100 per cent. If it is accepted that stabilization of emission levels until 2050 is a more realistic target, it will mean a greater focus on adaptation. In aggregative terms, the approach suggests the following targets:

Between 2003 and 2050, developed countries will reduce CO2 emissions by no less than 73 per cent and developing countries will increase CO2 emissions by no more than 73 per cent.⁶

The above does not mean that developing countries will not be making efforts to reduce emissions. Only that their cuts should be seen in relation to potential emission after taking into account their growth needs and not from the current levels. So far as reducing carbon intensity of growth is concerned, the developing countries will be making the same degree of effort as the developed countries. In 2003, CO2 emissions per unit of GDP in 2000 international \$ was 0.51 kg for the world, 0.46 for developed countries, 0.57 for developing countries. Assuming 2 per cent annual growth in GDP for the period 2005-2050 for the developed countries and 6 per cent for the developing countries, the above allocation of CO2 emission rights leads to carbon intensity of GDP (in PPP terms) of 0.048 kg per unit of GDP for

the developed countries and 0.063 for the developing countries in 2050. For both of them, it means annual reduction in carbon intensity of GDP by about 5 per cent per year. (See Table 3). Thus in the above scheme there will be parity between developed and developing countries in terms of efforts to reduce carbon intensity of growth: *Developed countries will aim at reducing carbon intensity of GDP by 5 per cent per year between 2003 and 2050.*⁷ Developing countries, whose emissions must rise as they develop, should not to follow a fuel rich path to growth. In this they should be effectively assisted by developed countries through measurable, reportable and verifiable technology transfer, financing and capacity building.

The targets on carbon intensity of GDP can in turn be divided into targets on reducing energy intensity of GDP and carbon intensity of energy. The former may be cost effective in purely economic terms while the latter will require subsidies to compensate for externalities.

Common but Differentiated Responsibilities and Respective Capabilities

Common but differentiated responsibilities must be the guiding principle in determining the different actions of the developed and developing countries. Within the efficiency targets, developing countries, which are at early stage of development, will be helped to maximize their growth performance, while the developed countries which are at a mature stage of development will constrain their growth targets within the allowable carbon emissions.

Thus for developed countries, with a growth rate of 2 per cent per year, CO2 emissions will be

⁴ If the base level is 1990 rather than 2003, the task will be even more difficult.

⁵ As per Summary for Policymakers of the Synthesis Report of the IPPCC Fourth Assessment Report (November 2007), this scenario will be in Category III Scenario which has the following characteristics : CO2 concentration at stabilization of 440-485 ppm; peaking year for CO2 emissions during 2010-2030; change in global CO2 emissions in 2050 between -30 to +5 % of 2000 emissions, global average temperature rise above pre-industrial at equilibrium, 2.8-3.2 degree C; global average sea-level rise above pre-industrial level 0.6-1.9 meters.

Table 3: Targets on reducing carbon intensity of GDP

	GDP in trillions of 2000 PPP\$		CO2 emission (kg per 2000 PPP\$ of GDP)	
	2005	2050	2003	2050
Developed countries	29.4	71.7 (2%)	0.46	0.048 (-5.0)
Developing Countries	25.3	348.5 (6%)	0.57	0.063 (-5.0)
World	54.7	420.2 (4.6%)	0.51	0.060 (-5.0)

Note: Figures in parentheses are annual growth rates between 2005 and 2050.
Source: WDI and author calculations.

reduced by about 3 percent per year, leading to a 73 percent reduction between 2005 and 2050. This target will be mandatory.

For developing countries a similar effort at reducing energy intensity with 6 per growth rate per year, CO2 emission will increase by about 1 percent per year with an increase of 73 percent between 2005 and 2050. For developing countries, these targets will be conditional on receiving transfers of funds and technology from the developed countries, in recognition of limited capabilities of developing countries and the ecological debt owed by the developed countries for their past emissions.

Getting Carbon Prices Right for Efficiency

Kyoto Protocol and the associated programs have been dominated by planning mindset. Targets are determined by administrative/political process and countries (and production units) are required to fulfill the targets with the option to buy out emissions above the target through trading mechanism. As noted above, the trends over 1990-2003 do not give an encouraging picture of success in achieving these targets. Perhaps more attention should be given to articulating the instruments, in particular, market-based instruments such as pricing to achieve the goals of emission reductions.

For a generalized impact on carbon use with minimum of bureaucratic intervention, the first step is to get the carbon prices right. This in turn would have two steps.

The first step in this direction is the raising of energy prices, especially in the OECD countries. This will result not only in curbing consumption but also providing the much needed incentives for R&D in clean technologies in the countries where such advanced research is really possible. A cap and trade scheme, if a tax is not possible, should be immediately put in place. And, simultaneously, encouragement to R&D also needs to be done through subsidization. For

developing countries it is essential to understand that high energy prices are, perhaps, what mitigate against greater consumption and in that sense contributing to keeping consumption down with concomitant lower emissions. For a country like India, where much is made of subsidizing of kerosene and diesel, it is important to also note the high rate of taxes on petroleum that almost neutralizes the so-called subsidy. In-fact, from a development perspective, we need to think of a poor targeted energy subsidy to give many more of the poor access to modern energy sources.

The second step will be to explore the mechanism for taxing carbon emitters. The theoretical rationale for such tax is clear. It is interesting to note that eminent economists such as Jagdish Bhagwati, Joseph Stiglitz, Larry Summers, Jeffrey Sachs, Paul Krugman who have differing views on many developmental issues all seem to agree that the sources of negative externality should be taxed to compensate for the damage done by emission. If one takes a conservative estimate of the average social cost of emission at \$10 per ton of CO2, a carbon tax of equivalent to that cost will yield about \$260 billion per year which can go a long way to meet the costs of mitigation. In view of the ecological debt of the developed countries, the tax collected in the developed countries should accrue to a global fund for adaptation, mitigation actions in developing countries, while the tax collected in developing countries should remain with them and be similarly deployed.

In view of the fear of the word “taxation” in the U.S. politics, carbon tax approach has been discouraged in the past and it is fashionable to say that the carbon tax approach is academic and it has “no traction”. However, the situation is changing even in the U.S. An excellent review of the problems of cap and trade approach and the merits of the carbon tax approach is provided in a publication in a highly conservative think-tank in the U.S.⁸ and a private bill has been introduced

⁶ It is encouraging to note that the British government has published a ground-breaking climate change bill on November 15, 2007 starting a parliamentary process that could lead to a legal limit on national emissions of carbon gases within six months. The bill sets a target of cutting national emissions of climate-warming carbon dioxide by 60 percent by 2050, which is only marginally short of the target suggested above. While this law would make Britain the first country to adopt such a legally binding commitment, the UK's record on emissions reductions is questionable. They need to walk the talk.

⁸ “Climate Change: Caps vs. Taxes”, by Kenneth P. Green, Steven F. Hayward, and Kevin A. Hassett, American Enterprise Institute for Public Policy Research, June 2007.

in the US Congress for a \$10/ton tax on carbons. In a recent speech, New York Mayor Mr. Bloomberg has made a penchant critique of cap and trade system and a cogent case for carbon taxes.⁹ In our view, the possibility of a global carbon tax or a globally coordinated national carbon tax should be considered very seriously indeed. It is encouraging to note that IMF in its WEO 2008 makes a strong case for global carbon tax.

Development and Dissemination of Carbon-saving Technologies

Over the longer term technological breakthrough will perhaps provide the real solution to climate change problem. How can international community support such activities? What was done in the past for agricultural research activities (under CGAIR for example) could provide a model of what international institutions can do for carbon saving technologies.

There are many examples of carbon saving technologies and practices at micro and macro level around the world. These “success stories” need to be publicized. Perhaps international institutions can create a web page for ready access to such success stories. They could also launch a program for social marketing the importance of carbon emission reduction in the masses. The massive programs of popularizing family planning in developing countries, which seem to have made a dent in a very sensitive area, can provide an example of what can be done for climate change.

For widest possible dissemination of existing and new technologies, WTO regimes should be made sensitive to climate change issues. While the reduction of tariff barriers for low-carbon goods and services are often mentioned by developed countries, the real barriers to technology transfer are intellectual property rights. Although technology transfer is one of the objectives of TRIPS the progress on this front is inadequate and demands to opt for stronger intellectual property rights in developing countries irrespective of their technological capability hinders transfer of technology. In case of global climate change, the access to Environmentally Sound Technologies (ESTs) should not be withheld on account of weaker intellectual property rights in developing nations.

The Doha Declaration came out with a solution to facilitate access to drugs and pharmaceuticals, particularly in case of HIV/AIDS. In view of the negative impacts, particularly the health impacts of global climate change, the parties to WTO should extend a

similar approach to facilitate transfer of technologies and ensure that intellectual property rights do not become a barrier. Montreal Protocol provides a successful example where the global community came together to ensure that all countries could get access to technologies to control and eliminate the Ozone Destroying Substances (ODS). It provided for an integrated mechanism to take care of the needs of developing nations to technology and provided incentives for transfer of technology. In view of the public goods nature of the global climate and to ensure that developing nations do not suffer from negative impacts of climate change due to lack of technology, it is suggested that the global community can formulate a similar mechanism to develop, transfer and use of environmentally sound technologies to mitigate global climate change. This mechanism should complement the various multilateral and bilateral initiatives of technology transfer in the context of global climate change.

The development and transfer of technologies can be stimulated through many measures including patent buy-outs for important technologies, global venture capital fund to commercialize clean energy technologies, transfer of technologies to public domain, enable technology transfer through licensing schemes with reduced duration of intellectual property rights, and flexible mechanisms of climate technology transfer taking into account the need for long-term climate stabilization.

Global Institutional Framework for Effective Implementation

Climate change is now widely recognized as perhaps the greatest market failure in human history and a perfect example of negative public good. As mentioned above, the difficulties of making progress in this area should not to be underestimated. Just as provision of national public goods requires national governmental intervention, provision of global public good may require a breakthrough in global governance structure. And in this it is imperative that the developing countries have real voice and participation. The massive task of redistributing resources from the minority who owe most of the carbon debt to the majority who are the victims of the climate change will require a global compact and global authority to implement it.

The primary responsibility for helping to meet the challenge of a truly global public good such as coping with climate change should go to the global institutions. In this context the UN

⁹ <http://cityroom.blogs.nytimes.com/2007/11/02/bloomberg-calls-for-tax-on-carbon-emissions/>

system is the appropriate forum for *negotiations and agreements* on global program for climate change. It should also be the main place for ensuring compliance, meeting commitments, which should not be seen as philanthropy but as obligation, and establishing institutions that can ensure in an equitable manner that the required resources are made available, especially for developing countries.

The Bretton Woods Institutions which seem to be losing their traditional business may also be restructured to deliver on this new global mission. The traditional tasks of macro-economic stability, balance of payments support, infrastructure development and poverty reduction which are more of national or regional public goods than global public goods could be increasingly left to the regional development banks while the global institutions concentrate on truly global public goods such as emission control. IMF could be an ideal agency for reviewing the issues of carbon subsidy and carbon taxation at national and global levels and the World Bank an ideal agency for supporting projects and programs for carbon reduction. IMF's Article IV Consultation Reports could be restructured to become a vehicle for surveillance on taxes, subsidies and other carbon reduction programs of both developed and developing countries.¹⁰ The World Bank can build upon its experience of development policy loans to help developing countries to design and fund the programs for reducing carbon intensity of these economies. However, the key in all of this is that governance in these institutions reflect new global realities, follow principles of equity and move away from following the dictates of the so-called "donors".

Mobilizing Funding for Carbon Saving

If reducing CO₂ emission by 50 per cent by 2050 is not realistic, global warming of more than 2 degree centigrade may be unavoidable and adaptation to such climate change has to be given a more serious place in global discussions on climate change than has been the case until now. Annual costs of adaptation activities could easily exceed \$50 billion per year. A large part of these activities will have to occur in developing countries, which do not have resources of their own to fund these programs.

Country by country assessments should be made of the resource needs for both mitigation and adaptation. However, UNFCCC figure of annual bill of \$200 billion per year for activities related to climate change seems a good enough figure to start with. Carbon taxation can yield

more than \$400 billion per year, 50 per cent of which could well be allocated to carbon reduction and climate adaptation programs.

Since for climate change what matters is the stock of GHG and not just flow, the concept of carbon tax should be applied to the stock and not just the flow. All countries developed and developing should agree to pay a service charge on their carbon debt based on their contribution to the stock since industrialization and those funds should be used for carbon saving wherever the most efficient opportunities are available.

The current financial crisis in the US suggest yet another source of funding for the global public good. Fred Bergsten in his op-ed piece in *The Financial Times* of December 12, 2007 wrote:

The world economy faces an acute policy dilemma that, if mishandled, could bring on the mother of all monetary crises. Many dollar holders, including central banks and sovereign wealth funds as well as private investors, clearly want to diversify into other currencies. Since foreign dollar holdings total at least \$20,000 billion, even a modest realization of these desires could produce a free fall of the US currency and huge disruptions to markets and the world economy. Fears of such an outcome have risen sharply in both official circles and the markets.

However, none of the countries into whose currencies the diversification would take place want to receive these inflows. The eurozone, the United Kingdom, Canada, and Australia among others believe that their exchange rates are already substantially overvalued. But China and most of the other Asian countries continue to intervene heavily to keep their currencies from rising significantly. Hence, further large shifts out of the dollar could indeed push the floating currencies far above their equilibrium levels, generating new imbalances and a possibly severe slowdown in global growth.

There is only one solution to this dilemma that would satisfy all parties: creation of a substitution account at the International Monetary Fund (IMF) through which unwanted dollars could be converted into special drawing rights (SDR), the international money created initially by the fund in 1969 and of which \$34-billion-worth now exists. Such an account was worked out in great detail in 1978–80 during an earlier bout of currency diversification and free fall of the dollar that closely resembled today's circumstances.

The idea of a substitution account is simple. Instead of converting dollars into other currencies

¹⁰ The Bill to be introduced in the British Parliament putting a national legal limit on carbon emissions by 2050 (see footnote 10 above) could be an example of how the carbon emission targets can be made legally binding in developed countries with surveillance provided by national and international agencies.

through the market, depressing the former and strengthening the latter, official holders could deposit their unwanted holdings in a special account at the IMF. They would be credited with a like amount of SDR (or SDR-denominated certificates), which they could use to finance future balance-of-payment deficits and other legitimate needs, redeem at the account itself or transfer to other participants. Hence the asset would be fully liquid.”

If SDR becomes the principal international reserve asset and IMF issues SDR on an annual basis to meet the currency needs of international trade and capital movements, the seigniorage that has been accruing to the US will accrue to the international community. Under current rules, SDR allocation will be largely to the developed countries. If these are then allocated by the developed countries to developing countries for funding climate change programs, this would constitute a transfer of funds from the developed to developing countries in recognition of their ecological debt. Such seigniorage could amount to hundreds of billions of SDRs and can meet large part of the needs for the provision of a truly global public good such as carbon saving. With the US current account deficits of more than \$700 billion per year set to come down, the “green” expenditure may in fact be a welcome aspect of global demand management.

Role of Regional Co-operation for Managing Climate Change

Managing climate change is a truly global public good and it would be logical, as argued above, to move toward strengthening global governance and global financial institutions to design, monitor, finance and evaluate global and national climate change management programs. However, the

current global governance structure is dominated by the North and it is possible that the North will not agree to transfer of resources through SDRs as proposed above. Thus while working on reform of global financial architecture, the South should also launch parallel efforts for reform of regional financial architecture. As the example of European Union shows, a regional financial architecture along with its own currency is fully compatible with an international financial architecture. In the regional financial institution, climate change management programs at national levels will be designed with the assistance of regional financial institutions and the risks of pressures from extra-regional players will be absent as has been the case with structural reform programs in EU context.

The needs and possibilities for such programs are most promising in the context of Asia. Asia with now has more than \$3 trillion of foreign exchanger reserves could create its own regional financial architecture along with its own reserve currency unit, an Asian Currency Unit(ACU) which will operate as a parallel currency to supplement the other international reserve currencies such as USD, Euro and even an SDR. The details of this proposal have been presented in RIS Discussion Paper No. 133. The seigniorage generated by this process can be tens of billions of USD equivalent and can go a long way towards funding the adaptation and mitigation costs of managing climate change in Asia.. While this would be “domestic” action, if one excludes Japan, it cannot absolve the North’s commitments for financial transfers, especially as they are the ones responsible for creating the problem of climate change and continue to exacerbate it.

— Policy research to shape the international development agenda —

RIS Reports, Discussion Papers, Policy Briefs, New Asia Monitor and RIS Diary are available at RIS Website: www.ris.org.in



RIS

**Research and Information System
for Developing Countries**

Core IV-B, Fourth Floor
India Habitat Centre
Lodhi Road, New Delhi-110 003, India.
Ph. 91-11-24682177-80
Fax: 91-11-24682173-74-75
Email: dgoffice@ris.org.in
Websites: <http://www.ris.org.in>
<http://www.newasiaforum.org>