## **Institute of Green Economy**

C-312, Defence Colony New Delhi 110024, India Telephone: +91-11-46103509

Email: <a href="mailto:contact@igrec.in">contact@igrec.in</a>
Website: <a href="mailto:www.igrec.in">www.igrec.in</a>

# Impact of Border Carbon Adjustment and Restrictions on Non-certified Timber on International Commerce in Wood Products<sup>1</sup>

Promode Kant<sup>2</sup> and Li Meng<sup>3</sup>

## Abstract

Climate change mitigation measures may soon begin to impact trade in wood products in two important ways. There is a possibility of introduction of Border Carbon Adjustment (BCA) by some developed countries on imports from developing countries to discourage the shift of their industrial production to territories with lower emission reduction requirements to avoid possible carbon leakages. It is usually assumed that Article III of UNFCCC prohibits mitigation measures that may affect international trade but Article II of the Kyoto Protocol appears to have moderated the seeming prohibition in the framework convention to a less demanding requirement of *minimizing* adverse effects on international trade, and also opened opportunities of future amendments. Specific situations under which BCA could be compatible with both WTO and UNFCCC have been analyzed and it is inferred that its effect on global wood product trade

<sup>&</sup>lt;sup>1</sup> Paper presented at the Second Northeast Asia International Ecology Conference held at Yichun, China, on Aug 27-28, 2011

<sup>&</sup>lt;sup>2</sup> Dr Promode Kant, Director, Institute of Green Economy, New Delhi. Email: promode.kant@gmail.com

<sup>&</sup>lt;sup>3</sup> Ms Li Meng, J.M. Senior Legal Counsel and Associate Professor, Yichun Forestry Administration Cadre School, Yichun City, China. Email:lm1537@163.com

would be limited as these are not energy intensive and the resulting carbon adjustment at the borders is unlikely to be prohibitively high. Also, since illegal logging of timber for consumption in the world's fast expanding wood product markets is a major cause of forest degradation that contributes towards global warming, trade restrictions that may be placed against wood products sourced from unverified timber by USA and EU under their domestic laws may not be inconsistent with the provisions of REDD under Cancun Agreement. The paper presents analysis of current trends of import of illegal timber into India and China and measures already taken to regulate it and suggests ways to address the core issues.

Key words: Border carbon Adjustment (BCA), WTO, illegal logging, carbon leakage, REDD, Lacey Act

#### Introduction

Forests are the source of about 20% of annual global CO<sub>2</sub> emissions and reducing emissions from deforestation and forest degradation (REDD) is now accepted as an important climate change mitigation strategy. Since unsustainable, and often illegal, harvesting of timber for consumption in the world's fast expanding wood product markets is one of the biggest causes of forest degradation there is increasing attention on the ways in which this illegal trade across the international borders can be regulated. Separately, there is also an attempt by industrialized countries, which are mandated to reduce greenhouse gas emissions under the Kyoto Protocol or under their own legislations, to discourage the shift of their industrial production to territories that do not yet have such mandatory emission reduction requirements to reduce their costs. This is bound to have important trade ramifications for many fast developing economies like India and China and an attempt has been made in the following pages to briefly analyse some of these issues.

In preparation for the forthcoming UNFCCC COP 17 in Durban later this year India has sought to include an additional agenda under the section of "Review of implementation of commitments and other provisions of the Convention" proposing that the Developed Country Parties should not be allowed to use Unilateral Trade Measures (UTMs), including all kinds of fiscal and non-fiscal border trade measures, against goods and services from Developing Country Parties to combat climate change as it would constitute a disguised restriction on international trade in violation of GATT and would actually amount to transferring the cost of climate change mitigation to the developing countries in complete violation of the letter and spirit of the UNFCCC. India

has proposed that the COP should expressly prohibit use of UTMs to address the issue of carbon leakages as such measures would have severe adverse consequences for developing countries and will compromise the founding principles and the core provisions of the Convention (MoEF, 2011). China has also voiced similar concerns on a number of occasions in the recent past.

The Border Carbon Adjustment (BCA) is the term used for a proposed border tax on imports from countries that are not required to undertake GHG emission reduction measures under the Kyoto Protocol, or under their own domestic legislations, in order to create a level playing field by removing the competitive disadvantage that the domestic manufacturers of like goods and services would face in developed countries. This could take the shape of a carbon tax equal to the amount of money that would have been required to be spent towards climate mitigation by the foreign producer had it been produced domestically. Alternately, the foreign seller could be asked to purchase an equivalent amount of emission credits (Cosbey, 2008). This is a kind of the Border Tax Adjustment (BTA) which is used to promote competition by levelling the playing field between the taxed domestic goods and the untaxed imports so that the consumer is able to make choices between like goods without being influenced by the differing tax regimes in the countries of production (ibid, 2008). This ensures that the globalized market is able to provide true competition based only on the benefits of lower production cost arising out of specialization and the transport costs, and unhindered by taxation policies and overt and covert subsidies.

The dominant thinking in the developing countries is that the attempt by the developed countries to introduce BCA is motivated not by the desire to avoid carbon leakages but to boost their own industries at the cost of the developing countries in violation of the letter and the spirit of both the WTO and the UNFCCC. Whether BCA would actually be imposed or not would depend upon whether it is in accordance with the WTO Rules and, equally importantly, passes legal scrutiny under the UNFCCC, particularly in the light of specific provisions of UNFCCC that there should be no arbitrary restriction on trade under the guise of climate change mitigation action. These two questions have been examined below in details

## Would BCA be WTO legal?

The mandate of the WTO is to provide a level playing field to the producers of goods and services across the world. Those who can produce best quality goods at the lowest prices, using their specialised skills, and other local factors of production, to their comparative advantage, would then be able to profit from their entrepreneurial actions by selling their products anywhere on the globe, limited only by the transport costs. This would not only ensure benefits to the consumers but also encourage a geographically well spread pattern of investment providing increased employment and incomes to an increasingly larger number of people across the globe (WTO-UNEP, 2009). This is done by easing trade restrictions including the tariff and non tariff barriers on goods coming from outside. As a result the global trade has increased by more than 32 times higher today than it was in the 1950s. This multifold expansion has been enabled by the technological advances that made transportation and communication far more efficient and low cost as also through drastic change in the policies governing trade across political frontiers (ibid, 2009).

Increasing trade leading to higher productions often has significant environmental costs. Countries that are economically developed, and have a stable polity, usually demand higher environmental standards from their businesses compared to less developed countries where the political economy may not yet lay that high a stress on the quality of their environment. This could encourage migration of polluting industries to less demanding political jurisdictions and thus not only adversely affect the economy of the developed countries but also on the overall welfare of the poorer countries willing to accept higher levels of pollution either as a matter of state policy or, more often, in clandestine ways. In order to avoid such a fall out it has become acceptable under the WTO that some degree of trade regulations might be necessary to achieve specific desirable policy objectives (WTO-UNEP, 2009).

This is particularly so because there is inconvertible evidence that the global trade has not changed the consumption patterns towards a lesser carbon emission path either in the developed or in developing countries. On the contrary, the change in consumption emissions has increased by about 6.6 % between the years 1990 to 2008 in the Annex I countries even as their territorial emissions decreased by 1.8 %. During this period the increase in territorial emissions was 112.3 % in the non Annex I countries while their consumption emissions increased by 101.7% (Clark, 2011). If trade is included in the analysis then the territorial emissions of the non-Annex B countries would stand lowered by 9.8% compared to that without trade. Expectedly, China showed a highest increase of 4635 million tons of CO<sub>2</sub> (192%) in its territorial emissions and 3551 million tons (163.7%) in consumption emissions during the same period, while India stood next at 1066 million tons (154.3%) and 902 million tons (134.7%) respectively (ibid, 2011).

#### **GATT Focuses on Product, not Process**

GATT is premised on the principle of non-discrimination between domestic and imported products and prohibits distinctions that are based on process and production methods. Climate change mitigation, on the other hand, targets production processes that emit higher amount of greenhouse gases, are less energy efficient and are not aligned with movement towards a low carbon economy. Under GATT Article I all member countries are required to be treated as Most Favoured Nations for trade purposes and no discrimination across the countries is permitted. This would prohibit discrimination among products from countries with different climate mitigation constraints so a general border tax against goods originating in countries that have no or low emission reduction targets would not be permissible.

Article II permits tariffs on the imported goods at the borders up to the bound level. This means that the collection of greenhouse gas mitigation related measures in the form of increased tariff at the borders would be WTO compliant if the total tariff does not exceed the bound level. Since in wood products the energy usage is usually far less than, say, a steel or aluminium product the greenhouse gas mitigation related measures can be expected to be small and it might fit within the bounds in most cases. But if the additional tariff differentiates between the countries of origin than it would be in conflict with the Article I that prohibits discrimination between like products from different countries. So such a measure would have to be applied uniformly and cannot be targeted at specific countries like China and India alone.

If a greenhouse gas mitigation related measure is an internal measure than Article III on national treatment would apply which means that all like products, domestic or imported, would face the same tax burden on the final product or on the direct inputs. A question may arise whether an emission related measure can be a direct input since in the common parlance it is clearly an output of production process, rather than an input. There is a significant provision in a Report on Border Tax Adjustment prepared by a Committee appointed for this purpose that has been extensively relied upon in the framing of WTO Rules, which clearly states that distinguishing between products on the basis of production methods is inconsistent with WTO.

## **WTO Case Laws and General Exceptions**

Over the past decade and more many such trade restrictions have been challenged by the exporting countries before the WTO Dispute Settlement Board and by now there is a good body of WTO case laws. One such case law is the US-Superfund case in which a domestic tax on an intermediate chemical was deemed a tax on the final derived chemical and an equivalent tax on the imported like product that used the same intermediate chemical in the production process was declared WTO consistent (WTO, 2011). It is possible to see this case law being applied to greenhouse gas emission mitigation measures as it comes closest to the situation.

Then there are also General Exceptions under GATT that make specific exceptions to the general rules. Article XVII (b) permits countries to enforce any measures that are necessary to protect human, animal or plant life or health subject to the condition that such measures are not arbitrary or unjustifiable discrimination between countries, or a disguised restriction on trade. The WTO case laws have tended to accept the importing country's powers to determine their own environmental objectives within reasonable limits, particularly if it can be conclusively established that such restrictions are necessary to safeguard human and other life forms (Cosbey, 2008). While there is as yet no climate change related case law it is possible to argue that policies that aim at reducing the GHG emissions would also fall in the same category as these are likely to have a profound effect on human life.

## Compliance of BCA with UNFCCC

For the Border Carbon Adjustment to be applied it should also be consistent with the provisions of the UNFCCC and the Kyoto Protocol. Section 5 of Article III of the UNFCCC specifically states that the "measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade". It was assumed that in the light of this specific provision no restrictions on trade on account of greenhouse gas emission reduction measures would be possible but the Kyoto Protocol, which first brought mandatory reduction targets for the developed countries, appears to have quietly introduced a measure of flexibility in this prohibition. The Section 3 of Article 2 of the Kyoto Protocol can be seen as moderating the prohibition to a less demanding requirement that "the Parties included in Annex I shall strive to implement policies and measures under this Article in such a way as to minimize (italics added) adverse effects, including the adverse effects of climate change, effects on international trade, and social, environmental and economic impacts on other Parties, especially developing country Parties and in particular those identified in Article 4, paragraphs 8 and 9, of the Convention, taking into account Article 3 of the Convention". And then it goes further by keeping the subject open for further amendment by asking that "the Conference of the Parties serving as the meeting of the Parties to this Protocol may take further action, as appropriate, to promote the implementation of the provisions of this paragraph".

The fact that carbon leakages can occur due to differential emission reduction requirements in a globalized economy has now led to serious attempts to breach the prohibition against placing restrictions on trade. Carbon leakage in the context of globalized trade refers to the geographical shifts in the emissions of greenhouse gases caused by asymmetric climate change mitigation constraints across the trading nations. This could happen when an industry in one country incurs higher costs on account of fiscal and non-fiscal measures taken in support of climate change mitigation but the same industry in other countries may bear no such additional costs. Such asymmetries in the resulting cost of production could encourage greenhouse gas emitting industries in Annex 1 countries to shift to the geographical locations in non-Annex 1 that offer cost advantage by not having to invest in emission reduction.

Leakages of this nature would nullify the mitigation of climate change which is the very reason for the existence of UNFCCC and, therefore, need to be addressed. Unless some other effective measures can be created to prevent carbon leakages across countries with asymmetric mitigation constraints it is very likely that border carbon adjustments, already politically very attractive in developed countries, would have to be tolerated by at least some of the more economically advanced developing countries. It might perhaps be time to think of negotiating an acceptable level of climate mitigation constraints the beginning of which was already made at Copenhagen in 2009 and carried forward at Cancun last year.

## **Effect of Unsustainable and Illegal Logging:**

The effect of Border Trade Adjustment on wood product trade, however, would be limited as these products are not energy intensive products and the resulting carbon adjustment at the borders of the countries that import wood products from developing countries is unlikely to be prohibitive. What might be more unsettling to trade in wood products in many developing countries including India and China is the effect of unsustainable and illegal logging causing degradation of forests particularly in view of the fact that forests are now recognized as a major source of greenhouse gases and since the Bali Climate Conference there has been a concerted effort to reduce emissions from deforestation and forest degradation including conservation and enhancement of carbon and sustainable forest management (REDD Plus).

In the first decade of this century China's import of timber have increased from 13.61 million m<sup>3</sup> to about 34.34 million m<sup>3</sup> annually (Table 2). In 2004 the roundwood imports of China stood at 22.58% of the total global imports of roundwoods (Table 1) and the percentage has sharply climbed since then which, according to one estimate, is

as much as half the entire traded volume across the globe (Laurance, 2008). China is also the biggest consumer of timber from Southeast Asia and from Russia. China has the world's largest wood product industry which has proved a very profitable venture having grown 3.5 times in just over a decade. Annual exports to USA alone are of the order of US\$ 3.5 billion (ibid, 2008).

Table 1: Percentage-wise production, export and import of roundwood in 2004

country	Total production of	Roundwood export	Roundwood import
	Roundwood as % of total global in 2004	as % of total global	as % of total global
USA	25.23	8.70	1.99
EU27	20.60	25.99	44.30
Canada	12.39	3.26	4.87
Russia	7.88	34.75	0.82
Brazil	6.44	0.30	
China	5.71	0.59	22.58
Indonesia	1.96	0.78	
Chile	1.78		
Australia	1.59	0.88	
Malaysia	1.53	4.56	
India	1.38		2.12
South Africa	1.29	0.31	
New Zealand	1.19	4.38	
Japan	0.94		10.36

Norway	0.44	 2.34
Korea		 5.34

Source: Bosello et al, 2010

India's imports of roundwood timber have also increased steadily between 2000 to 2010 from 2.1 million m<sup>3</sup> to 5.1 million m<sup>3</sup> annually (Table 2) but it is still a fraction of China's imports. India's increased demands are primarily driven by the burgeoning domestic market for furniture and other wood products whereas China's are driven by its wood product exports as much as by domestic consumption. Russian Federation is the single biggest supplier of round logs to China meeting almost half if its demand. The timber trade is so large that even in the unprocessed form of roundwood timber trade alone accounted for as much as ten percent of the total trade between these two giant countries. Concerned that more than 90% of Russian log exports were destined to China, Russia introduced a round timber tax in 2006 to encourage value addition within its territory.

Table 2: Imports of industrial round wood by India and China

	2000		2005		2010				
	quantit y	value	Unit value	quantit y	value	Unit value	quantit y	value	Unit value
India	2.1 Mm <sup>3</sup>	0.5 bn\$	\$238	3.75 Mm <sup>3</sup>	0.87 bn\$	\$232	5.1 Mm <sup>3</sup>	1.4 bn\$	\$274
China	13.6 Mm <sup>3</sup>	1.7 bn\$	\$125	30.09 Mm <sup>3</sup>	3.3 bn\$	\$123	34.34 Mm <sup>3</sup>	6.07 bn\$	\$176

Source: ITTO database

## Low and stagnant timber prices suggests unsustainable levels of harvesting

A large part of this fast increasing demand for timber appears to be coming from unsustainable harvesting of timber. The problem could be particularly severe in the extreme far east of Russia where poor logging practices and poor supervision is not uncommon. The price of roundwood exported from Russia to China between 2000 to 2005 actually dipped from a low of \$ 125 per m<sup>3</sup> to an even lower figure of \$123 per m<sup>3</sup> even when the demand went up by 2.2 times. And it registered only a very slight increase between 2005 to 2010, primarily because of the tax on export of round logs

introduced by Russia in 2006. This suggests that the supply was based on demand rather than silvicultural availability of timber in such large volumes. Further, the difference between relatively higher prices paid by Indian importers compared to the Chinese importers may not be entirely explainable by either the coniferous nature of Russian wood or the shorter haulage between sources in Russia and consuming industries in China as many potential forest harvesting areas in Siberia are not easily accessible by road or rail. The low prices militate against sustainable forestry and encourages switch over of lands to other more paying activities causing deforestation and increase in the greenhouse gases in the atmosphere.

Table 3: Countries of origin for imports of roundwood into China in 2010

Country	Volumes in Mm <sup>3</sup>	Percentage of total
Russian Federation	14.04	40.9
New Zealand	5.94	17.3
USA	2.78	8.1
PNG	2.48	7.2
Solomon	1.45	4.2
Canada	1.19	3.4
Australia	1.06	3.1
Malaysia	0.95	2.8
Gabon	0.74	2.2
Congo	0.48	1.4
Total	34.35	100

Source: ITTO data base

## Implications for trade in wood products:

Since illegal logging and unsustainable harvesting of forests leads to their degradation and cause significant emission of greenhouse gases into the atmosphere it has become a major concern under the UNFCCC and a number of developed countries have initiated legislations to curb this trend. In 2008 the USA introduced the Lacey Act Amendment for preventing trade in timber that is not harvested legally and sustainably and in 2010 the EU also has initiated regulation that require wood product based businesses to satisfy the importing countries in EU that the goods have not been produced from illegal and unsustainable harvesting of forest. Both this Acts will have serious ramifications for Chinese and Indian exporters of wood products, a part of whose raw material might be coming from unverified sources.

## **Consistent with Cancun Agreement**

There have been suggestions that the application of such domestic laws impinging on trade would be inconsistent with both the UNFCCC and the WTO. In so far as UNFCCC is concerned the adoption of REDD Plus as a major climate mitigation strategy at COP 13 in Bali, and further elaboration in two subsequent Conferences, is an event of high importance in this regard. The measures to be taken to promote REDD were laid out in great details at the Cancun Conference in December 2010 and Paragraph 68 of the Cancun Agreement specifically asks all Parties to the Convention to "find effective ways to reduce the human pressure on forests that results in greenhouse gas emissions, including actions to address drivers of deforestation". The proposed action by USA and EU under their domestic laws would thus be entirely in agreement with the Cancun Agreement. And, as already discussed in details above, these measures would fit well under the provisions of General Exceptions of GATT.

## The Chinese, Indian and Other Responses

Both the Indian and Chinese Governments have responded to the situation and India is in the process of developing a forest certification system that suits its conditions. This has, as expected, faced difficulty in obtaining consensus of various layers of stakeholders and, therefore, the process might still be delayed before India is finally able to put an effective system in place.

China, as the worlds' largest exporter of timber products, has also responded to the possibility of unsustainably and illegally harvested timber being imported by a series of stringent measures. The Chinese State Forestry Administration launched a study in 2009 to examine options for a Chinese timber legality verification scheme drawing on experiences gathered elsewhere which is expected to lead to detailed proposals for the establishment of a timber legality verification scheme in China. The Chinese government recognizes that illegal logging is a serious concern and intends to reduce reliance on imported timber by initiating a massive industrial plantation program that should be able to supply about 200 million m3 of logs annually. Domestically the State Forestry Administration has focussed its attention on the enforcement of national forest laws and internationally China is working jointly with countries across the world to reduce chances of illegal logging and trade (Wang et al, 2008).

Indonesia has also introduced a timber legality verification system that requires all forestry and timber companies to have the legality of their product audited independently in the absence of which their products will be considered illegal under Indonesian laws. EU and Indonesia have also entered into a voluntary partnership agreement under which Indonesia has agreed to permit export of only products that originate from verified timber under its domestic verification system.

#### Conclusion

Carbon leakage is an issue that is central to the UNFCCC and the climate mitigation measures adopted would make sense only when leakages are frontally addressed. There is a possibility that the Border Carbon Adjustment (BCA) being advocated by some developed countries on imports from developing countries may have hidden motives other than avoiding possible carbon leakages. But as long as leakage remains a real possibility appropriate measures would need to be taken to ensure that the mitigation efforts adopted are meaningful and are not laid waste by ignoring leakages. There are specific situations under which BCA could be legally compatible with the provisions of both WTO and UNFCCC. But its effect on global wood product trade would be limited as wood products are usually not energy intensive and the resulting carbon adjustment in the importing developed country is unlikely to be high enough to be a real obstruction to international trade.

Also, since illegal logging of timber for consumption in the world's fast expanding wood product markets is a major cause of forest degradation that contributes towards global warming, trade barriers that may be erected by USA under the amended Lacey Act of 2008 and by EU under its 2010 Regulations on use of illegally obtained timber can not prima facie be considered an arbitrary or disguised restriction against international trade. If fairly implemented, these domestic laws advance the cause of REDD Plus.

## Acknowledgement

The authors wish to acknowledge with thanks the contributions by Ms Swati Chaliha, Research Associate, Institute of Green Economy, New Delhi, in the writing of this paper.

#### References

- 1. Clark, D, 2011, Guardian, UK, published on May 3, 2011
- 2. Cosbey, A., 2008, Border Carbon Adjustment, IISD, downloaded from www.iisd.org on 20.07.2011
- 3. Forest Trends 2006, Harmonious forest sector development and trade between Russia and China stakeholder statement, http://forest-trends.org/~foresttr/documents/files/doc 1070.pdf, downloaded on 31.07.2011
- 4. ITTO, 2010, Annual review and assessment of the world timber situation 2010, International Tropical timber Organization, Yokohama
- 5. Laurance, W F, 2008, The Need to Cut China's Illegal Timber Import, Letter in Science, March 4, 2008
- 6. MoEF, 2011, Proposal by Government of India to UNFCCC for inclusion of additional agenda items in the provisional agenda of CoP-17, Downloaded from website of Ministry of Environment & Forests, Government of India, New Delhi, on 21.07.2011
- 7. Rainforest News 2011, China imports more and more timber, http://www.salvaleforeste.it/en/201105251450/china-importing-more-and-mo re-timber.html, downloaded on July 31, 2011
- 8. WANG, G., J. L. INNES, SARA W. WU, S. DAI and J. LEI (2008), Response to Letter "The Need to Cut China's Illegal Timber Imports" to Nature, March 4, 2008
- 9. WTO, 2011, The interface between the trade and climate change regimes: scoping the issues, Staff Working Paper ERSD-2011-1 Date: 12.01.2011, WTO
- 10. WTO-UNEP, 2009, Trade and Climate Change, A report by the United Nations Environment Programme and the World Trade Organization, WTO ISBN: 978-92-870-3522-6