

AN EPIC MESS: ‘EXHAUSTIBLE NATURAL RESOURCES’ AND THE FUTURE OF EXPORT RESTRAINTS AFTER THE *CHINA — RARE EARTHS* DECISION

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China’s export restraints on rare earths were the subject of a trade dispute with the European Union, Japan and the United States in the World Trade Organization. The decision of the WTO Appellate Body in the China — Measures related to the Exportation of Rare Earths, Tungsten and Molybdenum (‘China — Rare Earths’) case carries important consequences for developing countries that rely heavily on the resources and mining sector. Developing countries have often used export restraints to achieve varied objectives such as economic development and environmental protection. Export restraints are viewed as trade distortive and violative of the WTO norms. Therefore, developing countries face a complicated challenge on how to structure export restraint regimes that are WTO consistent and which allow domestic policy goals to be achieved. This article reviews the future of export restraints after the China — Rare Earths decision.

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I INTRODUCTION

Rare earths are essential inputs for today’s high tech digital age. These metals have wide-ranging applications in wind power generation equipment, defence industries, telecommunication equipment and permanent magnets. Rare earths are not rare in terms of availability but attract the moniker ‘rare’ due to a lack of concentrated occurrence in one locale, resulting in high mining costs.¹ Furthermore, mining operations in this sector cause considerable environmental harm. According to various 2014 estimates, China accounts for more than 90 per

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¹ See, eg, Markus Wagner, ‘WTO Law and the Right to Regulate: *China — Rare Earths*’ (2014) 18(10) *ASIL Insights* <<http://perma.cc/2F7U-Z5UE>>. See also Mark Tyrer and John P Sykes, ‘The Statistics of the Rare Earths Industry’ (2013) 10 *Significance* 12, 15.

cent of global rare earths production² while being endowed with only 37 per cent of the total global deposits.³ Mining of rare earths is highly damaging to the environment, leaving radiation in its wake and pollution of the surrounding soil, water and air.⁴

Recently, China was the subject of a trade dispute on rare earths involving the European Union, Japan and the United States. This dispute was triggered after China imposed various regulatory measures on the rare earths mining industry. These measures included the closure of certain mines, reduction of the volume of exports and the setting of export quotas.⁵ The measures were imposed as early as 2009 and their effects startled countries with industries that were dependent on imports of rare earths (namely the EU, Japan and the US).⁶ The complaining parties objected to the measures employed by China and viewed these as a violation of China's *General Agreement on Tariffs and Trade 1994* ('GATT' or 'GATT 1994')/WTO obligations as well as specific undertakings made by China when it acceded to the WTO.⁷ The trade dispute was escalated to the WTO Dispute Settlement Body ('WTO DSB') after the consultation process failed to produce an outcome. The dispute in question involved three parallel proceedings brought against China by the EU, Japan and the US. The Dispute Settlement Panel was constituted by the WTO DSB on 23 July 2012 which issued its report on 26 March 2014.⁸ China appealed the case decision before the WTO Appellate Body. The WTO Appellate Body decision was announced in August 2014 which upheld the earlier decision by the panel.⁹

The WTO decision in *China — Measures related to the Exportation of Rare Earths, Tungsten and Molybdenum* ('*China — Rare Earths*') carries important consequences for the mining and the resources sector. This decision also impacts future structuring of export restraints based on *GATT* art XX by resource-dependent countries. This article highlights the effect of the

² See, eg, International Centre for Trade and Sustainable Development, *WTO Appellate Body Confirms China Rare Earths Export Restrictions Illegal* (13 August 2014) <<http://perma.cc/RA7U-4DEN>>; International Centre for Trade and Sustainable Development, *WTO Panel Finds Chinese Export Restrictions on Rare Earths Illegal* (7 April 2014) <<http://perma.cc/S74M-G9V8>>. See also Sean Taggart and Kenneth P Green, 'Rare Earths: China Still Holding 90% of Global Market' on *Mining News Blog* (2 March 2015) <<http://perma.cc/5TH5-G3YS>>.

³ Tyrer and Sykes, above n 1; Wagner, above n 1.

⁴ Tyrer and Sykes, above n 1; Wagner, above n 1; Mike Ives, *Boom in Mining Rare Earths Poses Mounting Toxic Risks* (28 January 2013) *Yale Environment* 360 <<http://perma.cc/3CLV-G9JX>>.

⁵ Wagner, above n 1.

⁶ See, for example, the discussion in: Marc Humphries, 'Rare Earth Elements: The Global Supply Chain' (Report, Congressional Research Service, 16 December 2013) 13 <<http://perma.cc/TMV5-PHY9>>. See also Tyrer and Sykes, above n 1, 13.

⁷ For the case overview, see generally World Trade Organization, *China — Measures related to the Exportation of Rare Earths, Tungsten and Molybdenum* <<https://perma.cc/L9Q5-YMXU>>. See also *Marrakesh Agreement Establishing the World Trade Organization*, opened for signature 15 April 1994, 1867 UNTS 3 (entered into force 1 January 1995) annex 1A ('*General Agreement on Tariffs and Trade 1994*').

⁸ Panel Report, *China — Measures related to the Exportation of Rare Earths, Tungsten, and Molybdenum*, WTO Docs WT/DS431/R, WT/DS432/R and WT/DS433/R (26 March 2014) ('*China — Rare Earths*').

⁹ Appellate Body Report, *China — Measures related to the Exportation of Rare Earths, Tungsten, and Molybdenum*, WTO Docs WT/DS431/AB/R, WT/DS432/AB/R and WT/DS433/AB/R (7 August 2014) ('*China — Rare Earths*').

China — Rare Earths decision on the future of export restraint regimes. Part II briefly looks at the treatment of export restraints under the *GATT*/WTO framework and jurisprudence. Part III of the article summarises the relevant findings of the two cases where Chinese export restraints were the subject of WTO dispute settlement proceedings, ie the *China — Materials related to the Exportation of Various Raw Materials* (*'China — Raw Materials'*)¹⁰ and the *China — Rare Earths* decisions. Part IV analyses the possible effects of the *China — Rare Earths* decision while Part V concludes.

It should be noted at the outset that this paper focuses on arguments based on art XX(g) of the *GATT*, whereas the *China — Rare Earths* decision included further arguments based on commitments owed by China under the *Protocol on the Accession of the People's Republic of China* (*'Accession Protocol'*),¹¹ discussion of which falls outside the scope of this article.

II TREATMENT OF EXPORT RESTRAINTS

A *GATT/WTO Framework*

It is interesting to note that in order to realise its vision of free trade in goods and services, the WTO framework primarily focuses on regulating import controls. Import controls are not just limited to high tariffs but also include non-tariff barriers, trade remedies and various technical barriers to trade. The result is that in order to promote global trade, the WTO framework aims to eliminate trade barriers, reduce tariffs against imports and regulate the contracting parties' ability to employ trade remedies against damaging imports. Export controls largely escaped the attention of *GATT* negotiators in 1947 (the predecessor of *GATT 1994*) because of the overwhelming attention devoted at the time to reducing trade barriers and cutting high tariff walls.¹²

Review of the *GATT 1994* reveals that export controls are 'bunched-up' jointly with prohibition on quantitative restrictions (*GATT* art XI). In other words, the *GATT*/WTO framework treats export quotas similar to import quotas by outlawing them both. However, prohibition on quantitative restrictions under art XI has a number of exceptions. Articles XI(2)(a) and 2(b) are particularly relevant for export restraints. The art XI(2)(a) exception enables the *GATT*/WTO contracting parties to temporarily restrict exports to 'relieve critical shortages of foodstuffs' or other 'essential' products while the exception in art XI(2)(b) allows the contracting parties to apply technical standards for classification, grading or marketing of commodities in international trade.

In addition to the foregoing, *GATT* art XX allows the contracting parties' members to adopt various measures in line with their public policy. Hence, art

¹⁰ Appellate Body Report, *China — Measures related to the Exportation of Various Raw Materials*, WTO Docs WT/DS394/AB/R, WT/DS395/AB/R and WT/DS398/AB/R, AB-2011-5 (30 January 2012) (*'China — Raw Materials'*).

¹¹ *Protocol on the Accession of the People's Republic of China*, WTO Doc WT/L/432 (23 November 2001) (Decision of 10 November 2001) (*'Accession Protocol'*).

¹² Mitsuo Matsushita, 'Export Control of Natural Resources: WTO Panel Ruling on the Chinese Export Restrictions of Natural Resources' (2011) 3 *Trade, Law and Development* 267, 270. See also Bin Gu, 'Mineral Export Restraints and Sustainable Development — Are Rare Earths Testing the WTO's Loopholes?' (2011) 14 *Journal of International Economic Law* 765, 784.

XX and the exceptions thereunder are part of the export control regime under the *GATT*/WTO framework. Article XX allows the governments of the contracting parties to adopt measures in order to:

- a) Protect public morals;
- b) Protect human, animal or plant life;
- c) Restrict import or export of gold or silver;
- d) Enforce domestic laws and regulations that are not *GATT*-inconsistent;
- e) Restrict products made by prison labour;
- f) Protect national treasures and archaeological assets;
- g) Conserve exhaustible natural resources;
- h) Implement any obligations arising out of international agreements on commodities;
- i) Control exports for securing requisite quantities of essential raw materials to the domestic processing industries in the event of the price of raw materials being held below the international price level by any domestic price stabilisation program;
- j) Secure or distribute products which are in short supply nationally or locally.

GATT art XX exceptions are subject to an additional requirement provided for in the chapeau to the provision. The chapeau is found in the introductory lines of the provision and states that any measures taken by WTO members in line with the general exceptions shall not be arbitrary or discriminatory ‘between countries where the same conditions prevail’. More importantly, the chapeau clearly states that the exceptions provided under art XX must not be employed as ‘disguised’ forms of restrictions on international trade. Export restraints are also permissible under *GATT* art XXI(b)(iii), allowing the contracting parties to maintain trade restraints in case of war or other emergencies. Some commentators allude to the ineffectiveness of the *GATT* art XI prohibition on export quotas by pointing out the high number of accompanying exceptions.¹³

Tariffs on exports or export duties also constitute an additional dimension of export restraints. However, export duties are distinct from import tariffs because of the operation of *GATT* art II(1)(b). This provision imposes a limitation on the contracting parties from maintaining tariff levels on imports above the concession rates. Export duties have no such restrictions leaving the contracting parties to freely impose tariff-based export restraints.¹⁴ Mitsuo Matsushita explains that export duties as a measure for controlling exports are not prohibited under WTO law unless these are prohibitively high.¹⁵ Export duties are commonly utilised by countries for both export control and revenue generation. However, once export duties reach a prohibitively high level they morph into

¹³ John H Jackson, William J Davey and Alan O Sykes Jr, *Legal Problems of International Economic Relations: Cases, Materials and Text* (West, 3rd ed, 1995) 946, cited in Matsushita, above n 12, 272.

¹⁴ Matsushita, above n 12, 273.

¹⁵ *Ibid.*

zero export quotas and would therefore fall within the ambit of the *GATT* art XI prohibition on quantitative restrictions.¹⁶

B *WTO Jurisprudence*

As explained above, *GATT* art XX allows contracting parties a ‘way out’ from the application of the *GATT* rules on non-discrimination. The foremost issue for the invoking party is the burden of proof. *GATT* is silent on this issue. WTO disputes such as *European Communities — Conditions for the Granting of Tariff Preferences to Developing Countries* (‘*EC — Tariff Preferences*’) and *United States — Import Prohibition of Shrimp and Certain Shrimp Products* (‘*US — Shrimp*’) clarified the standard as resting on the invoking party, that is, the party adopting the export restraint.¹⁷ The invoking party must demonstrate the justification for imposing the measure by relying on the defences enumerated in *GATT* art XX. Furthermore, the requirement of the chapeau must also be satisfied. The WTO Appellate Body in the *US — Shrimp* case further clarified the order in which the burden of proof has to be discharged. In the first instance, the invoking party must demonstrate that the measures in question fall within one of the listed exceptions under *GATT* art XX. Once this is accomplished successfully, the invoking party must satisfy the requirement of the chapeau. Therefore the order of application for the invoking party is to satisfy one of the exceptions under *GATT* art XX and then the chapeau.¹⁸ Amongst the major listed exceptions in *GATT* art XX, exceptions (b) and (g) stand out in terms of usage and disputes lodged at the WTO level.

1 *Exception (b)*

Exception (b) on protection of human, animal and plant life adopts a dual approach.¹⁹ The first step involves assessment for compliance of the impugned measures with art XX(b). If satisfied, the second step involves determination of the measures as ‘necessary’ in achieving the desired goals.²⁰ The use of the term ‘necessary’ has been the subject of much debate in the *GATT* and post-WTO dispute settlement systems. The first case in *GATT* jurisprudence that attempted to elaborate the term ‘necessary’ was the *US — Section 337 of the Tariff Act of 1930*.²¹ Hence, the Dispute Settlement Panel held that measures would not be considered ‘necessary’ if there are other alternatives available that are not inconsistent with the *GATT* norms.²²

¹⁶ Ibid.

¹⁷ See generally Appellate Body Report, *European Communities — Conditions for the Granting of Tariff Preferences to Developing Countries*, WTO Doc WT/DS246/AB/R, AB-2004-1 (7 April 2004) [95] (‘*EC — Tariff Preferences*’); Appellate Body Report, *United States — Import Prohibition of Shrimp and Certain Shrimp Products*, WTO Doc WT/DS58/AB/R, AB-1998-4 (12 October 1998) [157] (‘*US — Shrimp*’).

¹⁸ Appellate Body Report, *US — Shrimp*, WTO Doc WT/DS58/AB/R, [118]–[121].

¹⁹ See Panel Report, *European Communities — Conditions for the Granting of Tariff Preferences to Developing Countries*, WTO Doc WT/DS246/R (1 December 2003) [7.195]–[7.199] (‘*EC — Tariff Preferences*’).

²⁰ Ibid.

²¹ GATT Panel Report, *United States — Section 337 of the Tariff Act of 1930*, GATT Doc L/6439 (16 January 1989, adopted 7 November 1989) GATT BISD 36S/345.

²² Ibid [5.26].

In the post-WTO period, the Appellate Body in *Korea — Measures Affecting Imports of Fresh, Chilled and Frozen Beef* ('*Korea — Beef*')²³ expanded the meaning of 'necessary' by specifying the determination process as comprising of three stages:

[W]eighing and balancing a series of factors which prominently include the contribution made by the compliance measure to the enforcement of the law or regulation at issue, the importance of the common interests or values protected by that law or regulation, and the accompanying impact of the law or regulation on imports or exports.²⁴

WTO treatment of disputes involving art XX(b) show varied approaches and this has had a flow-on effect on China's defence in the *Rare Earths* case as well. For example, in *United States — Standards for Reformulated and Conventional Gasoline* ('*US — Gasoline*'),²⁵ the Dispute Settlement Panel did not examine the US Government measures on gasoline as a whole. Instead, the Panel focused its attention on the specific parts of the measures that were allegedly discriminatory against other WTO members.²⁶ The Panel held that according 'less favourable' treatment to imported gasoline was not 'necessary' in terms of art XX(b).²⁷ The Panel therefore, dismissed the US argument that the discriminatory measures in force were necessary to reduce vehicle emissions.²⁸

Another case which dealt with art XX(b) defence was *European Communities — Measures Affecting Asbestos and Asbestos-Containing Products*²⁹ where the measures (taken by France) concerned products containing asbestos known to cause asbestos-related diseases. The complaint was lodged by Canada, alleging that the French measures violated *GATT* art III on national treatment and *GATT* art XI on quantitative restrictions.³⁰ Canada argued that an outright ban was not justified on the grounds that asbestos can be handled safely. In other words, safe handling of asbestos through regulatory intervention can achieve the purpose that a trade-impeding ban was supposed to achieve.³¹ The Dispute Settlement Panel concluded that asbestos constitutes a health risk for the purposes of *GATT* art XX(b) and that a ban on import by France was necessary to prevent the associated health risks.³² The findings on 'necessity' were appealed.

The Appellate Body considered the question of adopting 'reasonably available' alternatives that would achieve the critical aim of protecting human

²³ Appellate Body Report, *Korea — Measures Affecting Imports of Fresh, Chilled and Frozen Beef*, WTO Docs WT/DS161/AB/R and WT/DS169/AB/R, AB-2000-8 (11 December 2000) ('*Korea — Beef*').

²⁴ *Ibid* [164] (emphasis added).

²⁵ Panel Report, *United States — Standards for Reformulated and Conventional Gasoline*, WTO Doc WT/DS2/R (29 January 1996) ('*US — Gasoline*').

²⁶ *Ibid* [6.21]–[6.25].

²⁷ *Ibid* [6.22]–[6.25].

²⁸ *Ibid* [6.28].

²⁹ Appellate Body Report, *European Communities — Measures Affecting Asbestos and Asbestos-Containing Products*, WTO Doc WT/DS135/AB/R, AB-2000-11 (12 March 2001) ('*EC — Asbestos*').

³⁰ Panel Report, *European Communities — Measures Affecting Asbestos and Asbestos-Containing Products*, WTO Doc WT/DS135/R (18 September 2000) [3.394].

³¹ *Ibid* [3.380]–[3.381].

³² *Ibid* [8.184]–[8.194], [8.196].

health from the adverse effects of asbestos.³³ In its ruling, the Appellate Body upheld the Panel's earlier findings. The Appellate Body stated that 'controlled use' of asbestos had not been demonstrated as an effective counter against asbestos-related disease; therefore, controlled use of asbestos 'would not allow France to achieve its chosen level of health protection by halting the spread of asbestos-related health risks'.³⁴ The Appellate Body held, '[c]ontrolled use ... would ... not be an alternative measure that would achieve the end sought by France'.³⁵ The Appellate Body concluded that the European Communities ('EC') had successfully demonstrated that France's measure was necessary to protect human health, thereby satisfying the art XX(b) requirement.³⁶

Article XX(b) exception also came up for consideration in the *EC — Tariff Preferences* case where the subject of the dispute was the preferential treatment extended by the EC to certain beneficiary countries under the Generalised System of Preferences ('GSP') system. The preferential treatment in question fell under the 'Drug Arrangements' whereby the EC extended preferential treatment to goods originating from pre-identified countries that were experiencing narcotics/drugs related challenges. The EC measure was held as violating the most-favoured-nation ('MFN') obligations under *GATT* art I(1).³⁷ In its defence, the EC argued that the Drug Arrangement promoted 'development of alternative economic activities to replace illicit drug production and trafficking' and hence the measures were justified under the *GATT* art XX(b) exception.³⁸ The Dispute Settlement Panel examined the EC policy in detail and concluded that the primary aims of the scheme were not those of protecting human health but were 'developmental policy, in particular the eradication of poverty and the promotion of sustainable development in developing countries'.³⁹ Therefore, the panel held that EC's defence under *GATT* art XX(b) failed. The Dispute Settlement Panel also considered the question of 'necessity' despite the failure of the EC defence. In tackling the question of 'necessity', the panel applied the Appellate Body reasoning in the *Korea — Beef* case.⁴⁰ The Panel considered a host of factors including the declining utility of GSP schemes due to global broad-based tariff cuts under WTO obligations, a lack of monitoring and compliance mechanisms for measuring effectiveness of the Drugs Arrangement in achieving the desired aim and the availability of less trade restrictive multilateral alternatives.⁴¹ The Panel's conclusion was that the Drug Arrangements part of the EC GSP schemes was not 'necessary' to protect human life or health.⁴²

³³ Appellate Body Report, *EC — Asbestos*, WTO Doc WT/DS135/AB/R, [170], [173]–[175].

³⁴ *Ibid* [174].

³⁵ *Ibid*.

³⁶ *Ibid* [175].

³⁷ Appellate Body Report, *EC — Tariff Preferences*, WTO Doc WT/DS246/AB/R, [191].

³⁸ Panel Report, *EC — Tariff Preferences*, WTO Doc WT/DS246/R, [4.92]–[4.99].

³⁹ *Ibid* [7.201].

⁴⁰ *Ibid* [7.211], citing Appellate Body Report, *Korea — Beef*, WTO Docs WT/DS161/AB/R and WT/DS169/AB/R, [161].

⁴¹ Panel Report, *EC — Tariff Preferences*, WTO Doc WT/DS246/R, [7.219]–[7.223].

⁴² *Ibid* [7.223].

2 Exception (g)

Exception (g) of the GATT art XX covers measures ‘relating’ to conservation of ‘exhaustible natural resources’. However, *GATT* adds the requirement of extending similar conservation measures to cover ‘restrictions on domestic production or consumption’. WTO jurisprudence revolves around determining the meaning of ‘relating’ to and ‘exhaustible natural resources’. Two WTO disputes, namely *US — Gasoline* and *US — Shrimp*, considered the meaning of this criterion prior to the *China — Raw Materials* and the *China — Rare Earths* cases.

In *US — Gasoline*, the challenged measures concerned US regulations on gasoline products that were intended to reduce vehicular emissions. Venezuela (the complainant) claimed that in adopting the measures, the US discriminated between domestic and foreign gasoline products contrary to the *GATT*. The US defended its measures under its interpretation of art XX(g).

The central argument in the case rested on conflicting interpretations of ‘exhaustible natural resources’ by the disputants and whether clean air constituted a resource that could be conserved for fear of it being exhausted. The US justified its regulatory measures with the argument that clean air was an exhaustible resource.⁴³ The US claimed that regulatory measures were necessary because pollution from vehicular emissions can exhaust clean air.⁴⁴ Venezuela took the view that art XX(g) is an exception to prohibition on exports of resources that could be exhausted, unless their exploitation is regulated.⁴⁵ Responding specifically to the US argument on clean air, Venezuela stated that air was a renewable rather than an exhaustible resource — Venezuela cited examples of petroleum and coal as exhaustible resources — and that clean air was a ‘condition’ of air.⁴⁶ By implication, Venezuela took the view that ‘exhaustible natural resources’ are either ‘tradeable’ or ‘renewable’.⁴⁷

The Dispute Settlement Panel considered the term ‘exhaustible natural resources’ and held that a ‘resource’ must have value.⁴⁸ The Panel also agreed with the US argument that clean air was a natural resource that had value and could thus be depleted.⁴⁹ Responding to Venezuela’s argument that clean air was renewable, the Panel held that any regulations designed to arrest the depletion of clean air was a policy to conserve natural resources, thereby satisfying *GATT* art XX(g).⁵⁰ *US — Gasoline* went to the Appellate Body but the findings of the Dispute Settlement Panel on the issue of clean air being an ‘exhaustible natural resource’ was not appealed by the disputants.

Article XX(g) received deeper treatment by the WTO Appellate Body in the high profile *US — Shrimp* case. This case involved an import ban imposed by the US against shrimp products originating from certain countries that did not use shrimp nets with a turtle excluder device (‘TED’). US law mandated local

⁴³ Panel Report, *US — Gasoline*, WTO Doc WT/DS2/R, [6.36].

⁴⁴ *Ibid.*

⁴⁵ *Ibid.*

⁴⁶ *Ibid* [3.60].

⁴⁷ *Ibid* [3.60], [6.36].

⁴⁸ *Ibid* [6.37].

⁴⁹ *Ibid.*

⁵⁰ *Ibid.*

businesses engaged in shrimp harvesting business must use a TED.⁵¹ Whilst the US also extended the facility of longer transition periods along with technical and financial assistance to the Caribbean countries, it did not extend the same facilities to the four complaining countries (India, Malaysia, Pakistan and Thailand).⁵²

The complaining countries claimed violation of *GATT* arts I, XI and XIII, while the US cited art XX(g) in its defence. The central argument between the disputants hinged on the definition of ‘exhaustible natural resources’. The US argument was that sea turtles were living creatures under threat of extinction and therefore were an ‘exhaustible natural resource’.⁵³ The complainants were of the view that ‘exhaustible natural resource’ should refer to exhaustible resources that were in finite supply instead of biological creatures or renewable resources.⁵⁴ The Panel skirted the issue of interpreting the term ‘exhaustible natural resources’ but did rule that the US measures could not be justified under the art XX(g) exception.⁵⁵

Upon appeal, the Appellate Body directly tackled the meaning of ‘exhaustible natural resources’. After considering the complainants’ argument that biological beings were capable of reproduction and hence ‘renewable’, the Appellate Body stated that ‘living species ... are in certain circumstances indeed susceptible of depletion, exhaustion and extinction, frequently because of human activities’.⁵⁶ The Appellate Body concluded its analysis by maintaining that ‘[l]iving resources are just as “finite” as ... other non-living resources’.⁵⁷ In deciding this issue the Appellate Body noted that the term ‘exhaustible natural resources’ was written during the *General Agreement on Tariffs and Trade 1947* era and now must be interpreted according to the prevalent concerns for protection of the environment.⁵⁸ The Appellate Body further held that the meaning of exhaustible natural resources was evolutionary in nature.⁵⁹ The Appellate Body observed in a footnote to para 131 that the drafting history of art XX(g) does not evince an intention on part of the drafters that the meaning of natural resources will exclude ‘living’ resources such as marine creatures. On the same note, Steve Charnovitz observes that conservation of living resources was not the primary aim behind art XX(g); however, the drafters agreed in a different context that fisheries and wildlife could possibly fall within the meaning of exhaustible natural resources.⁶⁰ The Appellate Body’s final conclusion was that the US

⁵¹ See especially 16 USC § 1537.

⁵² See World Trade Organization, *India etc versus US: ‘Shrimp-Turtle’* <<http://perma.cc/JBW5-NK3N>>.

⁵³ Panel Report, *United States — Import Prohibition of Shrimp and Certain Shrimp Products*, WTO Doc WT/DS58/R (15 May 1998) [3.241].

⁵⁴ *Ibid* [3.237].

⁵⁵ *Ibid* [8.1].

⁵⁶ Appellate Body Report, *US — Shrimp*, WTO Doc WT/DS58/AB/R, [128].

⁵⁷ *Ibid*. See also *General Agreement on Tariffs and Trade 1947*, opened for signature 30 October 1947, 55 UNTS 187 (entered into force 1 January 1948).

⁵⁸ Appellate Body Report, *US — Shrimp*, WTO Doc WT/DS58/AB/R, [129]–[130].

⁵⁹ *Ibid*.

⁶⁰ See discussion in: Steve Charnovitz, ‘Exploring the Environmental Exceptions in *GATT* Article XX’ (1991) 25(5) *Journal of World Trade* 37, 45–7. See also Steve Charnovitz, ‘The WTO’s Environmental Progress’ (2007) 10 *Journal of International Economic Law* 685, 700.

measures provisionally satisfied the standard of ‘exhaustible natural resources’ under art XX(g) but failed to satisfy the chapeau of art XX.⁶¹ Therefore, the US measures were not held as justifiable under *GATT* art XX(g).⁶²

US — Gasoline and *US — Shrimp* veritably pushed the boundaries of what is meant by exhaustible natural resources in the context of global trade. The emergence of China as a major producer, supplier and consumer of natural resources added a new layer of complications that led to the *China — Raw Materials* and *China — Rare Earths* cases. These are discussed in the following Part.

III THE CHINESE COMPLICATION

A China — Raw Materials

The *China — Raw Materials* case was lodged against China by the EU, Mexico and the US in 2009, challenging the validity of certain measures taken by China to restrict raw material exports used as inputs in the manufacture of various goods.⁶³ The complainants cited violation of *GATT* arts VIII, X and XI, as well as China’s specific commitments under pt I, paras 5.1, 5.2, 8.2 and 11.3 of the *Accession Protocol*.⁶⁴ The complainants also claimed violation of China’s commitments in paras 83–4, 162 and 165 of the *Report of the Working Party on the Accession of China*.⁶⁵ The complainants claimed that China was using export restraints to favour its downstream domestic industries with cheaper inputs, leading to a distinct advantage for Chinese manufacturers.⁶⁶

In response, China relied on *GATT* art XX(b) and (g) exceptions to justify its measures. China argued that some export measures were justified because they were linked to the conservation of exhaustible natural resources for some of the raw materials in question.⁶⁷ In addition to the conservation arguments that China had adopted for some of the raw materials, China further claimed export quotas and duties played a critical public health role in the form of pollution control.⁶⁸

It is interesting to note that unlike the preceding cases involving *GATT* art XX(b) and (g), the complaining parties did not contest the interpretation and application of exceptions (b) and (g). The complainants instead stated that China’s intention behind the export restraints was to grant a competitive edge to its downstream industries.⁶⁹

The Dispute Settlement Panel did not issue any further interpretation of the term ‘exhaustible natural resources’ and held that China’s export duty measures

⁶¹ Appellate Body Report, *US — Shrimp*, WTO Doc WT/DS58/AB/R, [134], [187].

⁶² *Ibid* [187].

⁶³ See World Trade Organization, *China — Measures related to the Exportation of Various Raw Materials* <<https://perma.cc/S8HR-VE7V>>.

⁶⁴ *Ibid*, citing *Accession Protocol*, WTO Doc WT/L/432.

⁶⁵ *Ibid*, citing *Report of the Working Party on the Accession of China*, WTO Doc WT/ACC/CHN/49 (1 October 2001).

⁶⁶ Panel Report, *China — Measures related to the Exportation of Various Raw Materials*, WTO Docs WT/DS394/R, WT/DS395/R and WT/DS398/R, [7.524] (*‘China — Raw Materials’*).

⁶⁷ See, eg, *ibid* [7.363]–[7.364].

⁶⁸ *Ibid* [7.474]–[7.475].

⁶⁹ *Ibid* [7.524].

on raw materials were violative of China's commitments under the *Accession Protocol* and the *GATT/WTO* rules.⁷⁰ The Panel further emphasised that for a restraining country to take advantage of *GATT* art XX(b) and (g) exceptions, it must control and reduce domestic production of the concerned raw materials in a manner that treats domestic and foreign consumers equally.⁷¹ The panel critiqued China's methodology and approach in justifying measures under the *GATT* art XX exceptions and held that China failed to demonstrate how export duties and quotas reduce pollution and enhance public health standards.⁷²

On appeal, China referred to the application of art XX(g) in the Panel's decision and requested the Appellate Body to find that the Panel had erred in its interpretation of the phrase 'made effective in conjunction with'.⁷³ The Appellate Body agreed with China and reversed the interpretation of the Panel but did not advance the meaning of the term 'exhaustible natural resources' any further in the case.⁷⁴ Therefore, in the lead up to the *China — Rare Earths* case, the meaning and interpretation of 'exhaustible natural resources' was not pushed beyond the cases of *US — Gasoline* and *US — Shrimp*. However, the *China — Raw Materials* case neatly summarises the criteria for using export controls in the natural resources sector: export controls of resources are permissible only if the requirements under *GATT* art XX are satisfied.⁷⁵ This becomes an important 'precedent' and development in the WTO jurisprudence on the area of export controls, especially when the predominant import control orientation of the *GATT/WTO* framework is considered.

B China — Rare Earths

In the *China — Rare Earths* case, the EU, Japan and the US (complaining countries) claimed that export quotas, export taxes and other such restrictive trade measures adopted by China on rare earths exports were inconsistent with the *GATT/WTO* framework. China justified its measures under art XX(g). The complainants acknowledged the argument that rare earths were 'exhaustible natural resources' but argued that the term 'exhaustible natural resources' is limited to resources in their raw form while excluding processed and semi-processed materials.⁷⁶ China countered that the coverage of the exception under art XX(g) is broad enough to include resources and minerals in all its states and forms.⁷⁷

⁷⁰ Ibid [8.8], [8.15], [8.22].

⁷¹ Ibid [7.404], [7.406], [7.408].

⁷² Ibid [7.525]–[7.538].

⁷³ Appellate Body Report, *China — Raw Materials*, WTO Docs WT/DS394/AB/R, WT/DS395/AB/R and WT/DS398/AB/R, [46]. The relevant findings were from: Panel Report, *China — Raw Materials*, WTO Docs WT/DS394/R, WT/DS395/R and WT/DS398/R, [7.397]–[7.398].

⁷⁴ See, eg, Manjiao Chi, "Exhaustible Natural Resource" in WTO Law: *GATT* Article XX (g) Disputes and Their Implications' (2014) 48 *Journal of World Trade* 939, 958.

⁷⁵ Appellate Body Report, *China — Raw Materials*, WTO Docs WT/DS394/AB/R, WT/DS395/AB/R and WT/DS398/AB/R.

⁷⁶ Panel Report, *China — Rare Earths*, WTO Docs WT/DS431/A/R, WT/DS432/A/R and WT/DS433/A/R, [7.246], [7.364].

⁷⁷ Ibid.

The Dispute Settlement Panel recognised the fact that there is no internationally agreed definition of the term ‘exhaustible natural resources’ and ‘the precise point at which processed raw materials cease to be considered “exhaustible natural resources” for the purposes of Article XX(g) has never been addressed in WTO dispute settlement’.⁷⁸ The Dispute Settlement Panel noted that the disputants agreed that a measure may relate to conservation of an exhaustible resource even when that particular resource in its raw form is not under the coverage of a certain measure.⁷⁹ The Panel also acknowledged China’s argument concerning the broad coverage of the term ‘exhaustible natural resources’ but went on to state that ‘exhaustible natural resources’ cannot be interpreted to include resources or other products that are unrelated to, or have no connection with, the resources in question.⁸⁰ After considering WTO jurisprudence on the matter, the Panel decided that it was not necessary to determine the precise meaning or scope of the term ‘exhaustible natural resources’ to resolve the dispute.⁸¹ The panel stated that ‘the subject matter of measures contemplated by Article XX(g) is not limited to raw natural resources, so long as the object of the concerned measures is to conserve, directly or indirectly, such raw natural resources’.⁸²

The Panel focused its analysis on the issue of whether China’s export quota measures ‘relate[d] to’ the ‘conservation’ of an exhaustible natural resource, rather than the distinct question of whether the products on which China’s measures operate were themselves exhaustible natural resources.⁸³ Having conducted its analysis, the Panel applied art XX(g) and held that China’s export duties and trading rights’ restrictive measures were not justifiable under art XX(g).⁸⁴

China lodged an appeal with the Appellate Body on the issue of Panel’s handling of art XX(g), specifically focusing on the Panel’s finding that export quotas imposed by China were not measures ‘relating to’ the conservation of exhaustible natural resources and the measures were not ‘made effective in conjunction with’ restrictions on domestic production.⁸⁵ China was also of the view that the panel did not move beyond a basic examination of the design and structure of China’s export quotas.⁸⁶ This was, China claimed, due to the Panel’s incorrect interpretation that ‘subparagraph (g) does not require an evaluation of the actual effects of the concerned measures’.⁸⁷ Furthermore, China contended that the Panel erred even when limiting the analysis to the elements of design and structure of the export quotas, for two reasons:

⁷⁸ Ibid [7.248].

⁷⁹ Ibid [7.247].

⁸⁰ Ibid [7.249].

⁸¹ Ibid [7.250].

⁸² Ibid.

⁸³ Ibid [7.251].

⁸⁴ Ibid [8.2]–[8.13].

⁸⁵ Appellate Body Report, *China — Rare Earths*, WTO Docs WT/DS431/AB/R, WT/DS432/AB/R and WT/DS433/AB/R, [2.28]–[2.29], [2.48]–[2.49].

⁸⁶ Ibid [5.144].

⁸⁷ Ibid.

- (i) The Panel admitted that export quotas send effective conservation signals to foreign users and this was abundantly clear to the Panel based on its own factual findings on the design and structure of the Chinese export quotas on rare earths.⁸⁸
- (ii) The Panel found existence of China's comprehensive conservation programme on rare earths.⁸⁹

The Appellate Body disagreed with China's contentions. In its response, the Appellate Body stated that the Panel did not consider itself bound to limit its analysis to an examination of the design and structure of the measures while interpreting art XX(g).⁹⁰ The Appellate Body endorsed the Panel's approach in focusing on the measures' design and structure, rather than on their effects in the marketplace.⁹¹

In reaching this conclusion, the Appellate Body dealt with China's claim that the Panel had erred in its interpretation of the term 'relating to' in art XX(g). According to China, the correct interpretation required the Panel to examine solely the structure and design of China's export quotas.⁹² Responding to this claim, the Appellate Body broke down China's argument in two parts and dealt with them separately.⁹³ First, the Appellate Body posed the query whether the Panel had actually made the findings as attributed to it by China (that the assessment of whether a measure, 'relates to' conservation, 'must be limited to an examination of the design and structure of the measure at issue').⁹⁴ Secondly, the Appellate Body inquired, was it proper for the Panel to place an analytical emphasis on the 'design and structure of the measures at issue'?⁹⁵

Dealing with the first query, the Appellate Body conceded that China was correct in observing the indication by the Panel whether measures relating to conservation 'must focus on the design and structure of that measure'.⁹⁶ However, the Appellate Body did not agree with China's contention that the assessment of whether a measure 'relates to' conservation 'must be limited to an examination of the design and structure of the measure at issue'.⁹⁷ The Appellate Body also stated that from the Panel's reasoning, it cannot be inferred that the Panel felt compelled to disregard evidence of the effects of China's export quotas and other measures on the market.⁹⁸ Instead, the Appellate Body stated, the Panel's interpretation of the term 'relating to' demonstrated that *GATT*-inconsistent measures are determined on a 'case-by-case' basis.⁹⁹ The Appellate Body cited various examples of the Panel's assessment in support of

⁸⁸ Ibid.

⁸⁹ Ibid.

⁹⁰ Ibid [5.151]–[5.154].

⁹¹ Ibid [5.152]–[5.153].

⁹² Ibid [5.102].

⁹³ Ibid [5.107].

⁹⁴ Ibid.

⁹⁵ Ibid.

⁹⁶ Ibid [5.108], citing Panel Report, *China — Rare Earths*, WTO Docs WT/DS431/A/R, WT/DS432/A/R and WT/DS433/A/R, [7.290], [7.379].

⁹⁷ Appellate Body Report, *China — Rare Earths*, WTO Docs WT/DS431/AB/R, WT/DS432/AB/R and WT/DS433/AB/R, [5.108].

⁹⁸ Ibid.

⁹⁹ Ibid.

its view, in particular highlighting para 7.363 of the Panel Report which stated that:

[A] measure's compliance with Article XX(g) can be determined only on the basis of a holistic assessment of whether the challenged measure relates to the conservation of rare earths and is made effective in conjunction with restrictions on domestic production of consumption.¹⁰⁰

The Appellate Body, therefore, disagreed with China's contentions and concluded that it was 'inaccurate to characterize the Panel's reasoning as suggesting that it was required to limit its analysis to an examination of the general design and structure of the measures at issue'.¹⁰¹

The Appellate Body then went on to tackle the question of whether the Panel's focus on the design and structure of the Chinese measures was proper.¹⁰² The Appellate Body specifically considered the proposition whether the panel was correct in adopting the approach that analysing Chinese measures under art XX(g) does not require an evaluation of the actual effects of the measures.¹⁰³

In answering this question, the Appellate Body noted that no 'specific analytical framework' is laid down in art XX(g) for assessing compliance or satisfaction with the said provision.¹⁰⁴ The Appellate Body referred to earlier decisions of *US — Shrimp* and *China — Raw Materials* and observed that these cases emphasised 'primacy of the design and structure of the measure at issue in the assessment of whether that measure is related to the conservation of exhaustible natural resources'.¹⁰⁵

In further justification of its reasoning, the Appellate Body stated that by focusing on the design and structure of the measure in question, a dispute settlement panel or the Appellate Body can use objective methodology in assessment of a measure satisfying the requirements of art XX(g).¹⁰⁶ The Appellate Body was of the view that adopting the objective methodology diminishes the 'uncertainty that would arise in basing such assessment on actual effects or the occurrence of subsequent events'.¹⁰⁷ The Appellate Body highlighted its observations in *US — Gasoline* that in proving the 'related to' requirement, art XX(g) does not provide for an empirical test (ostensibly because of the difficulty in establishing causation).¹⁰⁸ However, the panels are not precluded from considering empirical evidence if causation can be shown and

¹⁰⁰ Ibid, citing Panel Report, *China — Rare Earths*, WTO Docs WT/DS431/A/R and WT/DS432/A/R, WT/DS433/A/R.

¹⁰¹ Appellate Body Report, *China — Rare Earths*, WTO Docs WT/DS431/AB/R, WT/DS432/AB/R and WT/DS433/AB/R, [5.109].

¹⁰² Ibid [5.110].

¹⁰³ Ibid, citing Panel Report, *China — Rare Earths*, WTO Docs WT/DS431/A/R and WT/DS432/A/R, WT/DS433/A/R, [7.379].

¹⁰⁴ Appellate Body Report, *China — Rare Earths*, WTO Docs WT/DS431/AB/R, WT/DS432/AB/R and WT/DS433/AB/R, [5.111].

¹⁰⁵ Ibid [5.111], citing Appellate Body Report, *US — Shrimp*, WT/DS58/AB/R, [135]–[137]; Appellate Body Report, *China — Raw Materials*, WTO Docs WT/DS394/AB/R, WT/DS395/AB/R and WT/DS398/AB/R, [355].

¹⁰⁶ Appellate Body Report, *China — Rare Earths*, WTO Docs WT/DS431/AB/R, WT/DS432/AB/R and WT/DS433/AB/R, [5.112].

¹⁰⁷ Ibid.

¹⁰⁸ Ibid.

used to confirm the predictable effects of challenged measures.¹⁰⁹ Therefore, according to the Appellate Body, the issue of measures relating to conservation must be determined on a case-by-case basis through ‘careful scrutiny of the factual and legal context in a given dispute’.¹¹⁰ The Appellate Body thus concluded that the Panel

did not err by considering that it should focus on the design and structure of the export quotas in its assessment of whether those measures relate to the conservation of exhaustible natural resources within the meaning of art XX(g) of the *GATT 1994*.¹¹¹

An important outcome of the Appellate Body’s analysis is that empirical evidence can at best be used as a supplementary tool to establish the ‘related to’ requirement within art XX(g), but cannot be used as the sole basis to establish the relation between conservation aims and actual effects.

Another claim made by China on appeal to the Appellate Body was that the Panel erred in interpreting the requirement of ‘made effective in conjunction with’ stated in art XX(g). China’s claim was based on the argument that the Panel had made an erroneous finding of requiring an ‘additional’ ground of ‘even-handedness’ whereby the responsibility of conservation of exhaustible natural resources must be equally divided amongst domestic and foreign consumers.¹¹² China also contended that the Panel only analysed the general design and structure of the measures in question and did not give consideration to any evidence on the effects of such measures on the marketplace.¹¹³

The Appellate Body converted China’s appeal arguments on the issue of ‘made effective in conjunction with’ into three lines of inquiry. These are summarised below:¹¹⁴

- (i) Whether the ‘even-handedness requirement’ is a separate requirement that must be fulfilled in addition to art XX(g) conditions;
- (ii) Whether the Panel correctly understood the nature of balance required by art XX(g); and
- (iii) Whether the Panel was correct in limiting its analysis under the second clause in art XX(g), to only examining the general design and structure of the Chinese measures, excluding any evidence regarding their effects on the market.

Regarding the first inquiry, the Appellate Body’s view was that ‘even-handedness’ is not a separate requirement within art XX(g); rather it is used as a ‘shorthand reference’ for stating ‘if such measures are made effective in conjunction with restrictions on domestic product or consumption’.¹¹⁵ To underscore its point, the Appellate Body referred to the *US — Gasoline* case where it was held that the terms of art XX(g) embody a requirement of

¹⁰⁹ Ibid [5.113].

¹¹⁰ Ibid.

¹¹¹ Ibid [5.118].

¹¹² Ibid [5.119].

¹¹³ Ibid.

¹¹⁴ Ibid [5.122].

¹¹⁵ Ibid [5.123]–[5.124].

‘even-handedness’ in the imposition of restrictions.¹¹⁶ Turning its attention to the panel report, the Appellate Body noted the inconsistencies in the Panel’s analysis which seem to suggest in para 7.333 that ‘even-handedness’ is a separate and additional requirement under art XX(g), while stating in para 7.331 that ‘even-handedness’ is a synonym for the second part of sub-para (g).¹¹⁷ The Appellate Body reiterated its understanding of the ‘even-handedness’ requirement as not being a separate requirement under art XX(g). The Appellate Body concluded its analysis to the first inquiry by finding that the Panel erred in finding ‘even-handedness’ as a separate requirement that must be satisfied in addition to the requirement of ‘made effective in conjunction with restrictions on domestic production or consumption’.¹¹⁸

The Appellate Body then addressed the inquiry, whether the panel correctly understood the nature of balance required by art XX(g) whereby the responsibility of conservation of exhaustible natural resources is divided equally between domestic and foreign consumers. The Appellate Body noted that the meaning of some of the statements made by the Panel in the Panel Report was unclear and it was difficult to determine its compliance with the Appellate Body’s interpretation of art XX(g).¹¹⁹ The Panel had earlier stated that sub-para (g) aimed to ensure that ‘burden is distributed in an even-handed manner between foreign and domestic users’¹²⁰ and that Chinese measures imposed an ‘uneven burden ... without any equivalent, counterbalancing burden’.¹²¹ The Appellate Body stated that its understanding of ‘made effective in conjunction with’ requirement under art XX(g) meant that a WTO ‘[m]ember must impose “real” restrictions on domestic production or consumption that reinforce and complement the restriction on international trade’.¹²² The Appellate Body clarified that ‘real’ in the context of trade and export restrictions meant actual, effective restrictions and not just existing ‘on the books’, particularly when the majority of consumption of the natural resource in question was domestic in nature rather than international.¹²³ Concluding the analysis on the second query, the Appellate Body noted that art XX(g) did not require the restraining member to ‘justify its measure to establish that its regulatory regime achieves an even distribution of the burden of conservation’.¹²⁴ Hence, the Appellate Body found

¹¹⁶ Ibid [5.124], [5.127].

¹¹⁷ Ibid [5.125].

¹¹⁸ Ibid [5.127].

¹¹⁹ Ibid [5.131].

¹²⁰ Ibid [5.130], quoting Panel Report, *China — Rare Earths*, WTO Docs WT/DS431/A/R, WT/DS432/R and WT/DS433/R, [7.600], [7.810], [7.936].

¹²¹ Appellate Body Report, *China — Rare Earths*, WTO Docs WT/DS431/AB/R, WT/DS432/AB/R and WT/DS433/AB/R, quoting Panel Report, *China — Rare Earths*, WTO Docs WT/DS431/A/R, WT/DS432/R and WT/DS433/R, [7.595].

¹²² Appellate Body Report, *China — Rare Earths*, WTO Docs WT/DS431/AB/R, WT/DS432/AB/R and WT/DS433/AB/R, [5.132], citing Panel Report, *China — Rare Earths*, WTO Docs WT/DS431/A/R, WT/DS432/R and WT/DS433/R, [7.310], [7.312], [7.330].

¹²³ Appellate Body Report, *China — Rare Earths*, WTO Docs WT/DS431/AB/R, WT/DS432/AB/R and WT/DS433/AB/R, [5.136].

¹²⁴ Ibid.

that the panel had erred in finding that the burden of conservation must be evenly distributed between foreign and domestic consumers or producers.¹²⁵

Regarding the third inquiry, the Appellate Body noted the similarities between China's claim of error on the part of the Panel in interpreting the second clause of art XX(g) and the earlier argument concerning the 'relating to' requirement under art XX(g).¹²⁶ In addressing the latter issue, the Appellate Body stated that art XX(g) does not require an examination of the actual effects of the challenged measures, however, this does not preclude the Panel from considering empirical evidence.¹²⁷ Regarding the former, the Appellate Body quickly summarised the Panel's treatment of the challenged measures by observing that the 'Panel did not err in focusing on the design and structure of the measures at issue in its analysis under subparagraph (g)'.¹²⁸ However, the Appellate Body also observed that the Panel erred in holding 'even-handedness' as a separate requirement in addition to the 'made effective in conjunction with' requirement.¹²⁹ The Appellate Body further explained that the error on the part of the Panel was not fatal to the judgment because other elements of the Panel's interpretation 'appear to be in keeping' with the Appellate Body's interpretation of art XX(g).¹³⁰

The following points can be distilled from the judgment of the Appellate Body regarding the application of art XX(g):

- (i) The Appellate Body upheld the Panel's approach of not limiting its analysis to an examination of the design and structure of the measures and did not preclude consideration of evidence regarding the effects of China's export and conservation measures on the rare earths market.¹³¹
- (ii) The Panel erred in finding 'even-handedness' as a separate requirement in addition to other conditions stated in art XX(g). However, this interpretation did not constitute a legal error because the Panel did not engage in an assessment of whether the burden of conservation is distributed on an even scale between foreign consumers and domestic buyers.¹³²

The Appellate Body went on to conclude that China did not apply its export control measures in accordance with the chapeau of art XX and upheld the Panel's finding that various measures maintained by China on exports of rare earths, tungsten and molybdenum were not justified under art XX(g) of *GATT 1994*.¹³³ The Appellate Body recommended to the WTO DSB that China be requested to bring its violative measures in accordance with the *GATT/WTO* norms and China's *WTO Accession Protocol*.

¹²⁵ Ibid.

¹²⁶ Ibid [5.138].

¹²⁷ Ibid [5.113], [5.138].

¹²⁸ Ibid [5.140].

¹²⁹ Ibid [5.141].

¹³⁰ Ibid.

¹³¹ Ibid [6.2(a)(i)], [6.2(b)(i)].

¹³² Ibid [6.2(b)(i)]–[6.2(b)(iii)].

¹³³ Ibid [6.2(c)(i)].

IV ANALYSIS

The *Rare Earths* case comes in the series of cases involving export control measures on 'exhaustible natural resources'. Between *China — Rare Earths* and its predecessor, the *China — Raw Materials* case, no new interpretation of the term 'exhaustible natural resources' emerged. Furthermore, the respondent in the *China — Rare Earths* case, China, was accused of violating not only the *GATT/WTO* norms but also additional terms parallel to the traditional *GATT/WTO* norms (namely, the *China Accession Protocol*).

The Dispute Settlement Panel in the *China — Rare Earths* case avoided reinterpreting the meaning of 'exhaustible natural resources'. Hence the meaning of the term for the purposes of art XX(g) has not advanced from the older cases examined in the preceding parts of this paper. The Appellate Body also did not take up this matter and preferred concentrating on the Panel's analysis on appeal. Consequently, the ambiguity of the term 'exhaustible natural resources' continues.

One implication of this ambiguity is that in any future dispute, parties attempting to fine-tune their export conservation measures or export restrictions according to settled WTO jurisprudence will face the uphill task of determining the exact applicable standard for 'exhaustible natural resources'. The *China — Rare Earths* decision, far from resolving this central issue, has only added to the confusion.

In critiquing the *China — Rare Earths* decision in the context of earlier disputes involving art XX(g), Manjiao Chi highlights the inconsistent approach by the Appellate Body and the dispute settlement panels in establishing clear positions on the applicable criteria to determine what constitutes an exhaustible natural resource.¹³⁴

Chi observes that several diverse interpretations of the term 'exhaustible natural resources' emerge from previous *GATT/WTO* disputes where art XX(g) was cited as a defence by the responding WTO member.¹³⁵ These disputes are summarised in Appendix One and an analysis of the pertinent issues is included in this Part.

Appendix One gives a hint of the awkward reluctance by both the *GATT* era and the WTO dispute settlement panels to determine the precise meaning of the term 'exhaustible natural resources'. In the *US — Gasoline* case there was some attempt to clarify the meaning of the term 'exhaustible natural resources'. The resulting definition cannot be viewed as an all-encompassing concept that could, perhaps, later on be used as a blueprint for further development of WTO jurisprudence in the area. This is because the treatment of the issue by the Appellate Body mainly focused on the tradability and renewability of the resources in question. After *US — Gasoline*, all of the cases summarised in Appendix One clearly show the reluctance of the panels and then the Appellate Body in giving a precise meaning to this essential term. The result is that uncertainty and confusion reigns supreme when reviewing the *GATT/WTO* jurisprudence on art XX(g). In the absence of clear guidelines from the Appellate Body on the subject of 'exhaustible natural resources', the restraining countries

¹³⁴ Chi, above n 74, 962.

¹³⁵ *Ibid.*

(that is, the country trying to justify the export measures on the basis of conservation of natural resources) cannot be blamed for failure to comply with WTO law because, quite simply, the law is non-existent and sketchy at best.

Confusion in the area is illustrated through a curious observation from the *China — Rare Earths* case. In para 7.250 of the Panel Report, the Panel states that there is no need to determine the ‘precise meaning or scope’ of the term ‘exhaustible natural resources’ because the subject matter ‘contemplated by art XX(g) is not limited to raw natural resources, so long as the object of the concerned measures is to conserve, directly or indirectly, such raw natural resources’. This convoluted statement is a regrettable indication of three things. First, it resolves nothing and actually gives rise to further questions. Secondly, the WTO missed an excellent opportunity to resolve the central definitional issue within art XX(g). Broadly speaking, the question is not just about rare earths or raw materials but about all resources considered ‘natural’ and ‘exhaustive’. The WTO Dispute Settlement Panel or even the Appellate Body could have clarified the meaning. Instead, the cycle of confusion has been allowed to continue so that next time an art XX(g) issue is litigated within the WTO, the same issues, same cases, same provisions will be debated all over again in the Panel and the Appellate Body proceedings.

Thirdly, the WTO appears to be out of touch with the realities in developing countries, particularly the capacity restraints. In absence of clear regulations within the primary *GATT/WTO* agreements on the area of export controls and conservation measures for ‘exhaustible natural resources’, it is unrealistic to assume that policymakers and trade officials from developing countries will analyse the text of the primary *GATT/WTO* agreement and then navigate the labyrinth of the ‘settled’ cases on art XX(g), only to discover that there is no precise definition of ‘exhaustible natural resources’ and that there is no ‘precedent’ to follow.

Another difficulty in the area is illustrated by the WTO’s insistence that empirical evidence cannot be used as the exclusive test to determine the ‘related to’ requirement under art XX(g). This stance emerged from the *US — Gasoline* judgment and has been retained in WTO jurisprudence. The reason behind the *US — Gasoline* decision to exclude empirical evidence from determining the ‘relating to’ requirement was the difficulty in establishing causation.¹³⁶ The Appellate Body in paras 5.112 and 5.113 of the *China — Rare Earths* case added, however, that panels confronted with the task of determining the ‘relating to’ requirement under art XX(g) are not precluded from considering empirical evidence if causation can be shown and used to confirm the predictable effects of challenged measures. Here, the WTO ends up sending confused signals of not considering empirical evidence in deciding the ‘related to’ requirement and then turning around and saying that the dispute settlement panels are not prevented from considering empirical evidence.

If viewed purely from the developing country perspective, the reality is that the absence of any clear definition of ‘exhaustible natural resources’ in WTO jurisprudence makes the task of policymakers and trade officials nearly

¹³⁶ Appellate Body Report, *United States — Standards for Reformulated and Conventional Gasoline*, WTO Doc WT/DS2/AB/R, AB-1996-1 (29 April 1996) 21.

impossible in devising export control regimes that achieve local policy aims while not violating the *GATT*/WTO norms.

The problems do not stop here. Appendix One shows that seven out of nine *GATT*/WTO cases considered involved developed countries (most notably the US) debating the concept of ‘exhaustible natural resources’ and other ancillary requirements under art XX(g) in agreements that, ironically, the developed countries took the lead in drafting. Having had ample opportunity to create an epic mess, the developed countries now expect that developing countries intending export control for conservation purposes can somehow decipher the *GATT*/WTO law in this area. After interpreting the *GATT*/WTO law on the area of export controls, developing countries are then expected to design a regime that somehow does not fall afoul of their commitments under *GATT*/WTO, lest it trigger an expensive dispute settlement proceeding in the WTO. Once challenged, there is a high likelihood that the restraining country would lose any WTO dispute settlement proceedings. This is clearly noticeable from Appendix One which demonstrates that all of the cases involving art XX(g) were decided in favour of the complainants. When considered as part of the larger dimension of the WTO dispute settlement system, this does not come as a surprise.

Rudan Chen analyses 400 disputes in the WTO DSB and concludes that the WTO dispute settlement mechanism not only favours the complainants but also advises China and other developing countries to reform their policies so as to capitalise on the WTO dispute settlement system.¹³⁷ Chen’s argument builds on Robert Hudec’s formulation of the win rate for complainants in the *GATT* system as 77 per cent.¹³⁸ Chen’s analysis shows that the complainant win rate in WTO cases is much higher than the defendant’s win rate, with the compliance rate for rulings favouring the complainant exceeding 80 per cent.

Chen further argues that promotion of multinational corporations and industries was one of the predominant factors in designing the WTO system.¹³⁹ Chen compares the *GATT* system with the WTO system and concludes that the WTO is not only a system of international trade arrangements but also serves as a tool for expansion in the global market for multinational corporations.¹⁴⁰ Chen cites two examples to support his argument:

- i) The Fuji–Kodak film dispute between the US and Japan to illustrate the indirect usage of the WTO dispute settlement mechanism by multinational corporations.¹⁴¹
- ii) The *General Agreement on Trade in Services*,¹⁴² which was drafted by multinational corporations such as Citigroup and JP Morgan Chase and eventually adopted through lobbying.¹⁴³

¹³⁷ Rudan Chen, ‘The Asymmetry of the WTO Dispute Settlement Mechanism and Chinese Strategy: In What Ways Do the System and Results Favor Complainants?’ (2014) 9 *Frontiers of Law in China* 208, 210.

¹³⁸ *Ibid* 210, citing Robert Hudec, *Enforcing International Trade Law: The Evolution of the Modern GATT Legal System* (Butterworths, 1993) 278.

¹³⁹ Chen, above n 137, 224–5.

¹⁴⁰ *Ibid* 225.

¹⁴¹ Panel Report, *Japan — Measures Affecting Consumer Photographic Film and Paper*, WTO Doc WT/DS44/R (31 March 1998).

Chen's final argument is that the more frequently a WTO member brings an action, the more benefits that WTO member can access under the WTO system.¹⁴⁴ According to Chen, frequent actions are possible only if there is capacity to undertake and pursue legal matters in the WTO dispute settlement system.

The aforementioned arguments are compelling when considered against the backdrop of the *China — Rare Earths* case. It is important to keep in mind the users of rare earths in order to understand the argument made by Chen. The main users of rare earths are high tech, value-added industries based in the complainant countries that manufacture items such as IT equipment, telecommunication equipment, wind power generation plants, smartphones and fuel efficient car batteries, to name just a few.¹⁴⁵ These very same industries pressured their respective governments to institute WTO dispute settlement proceedings.¹⁴⁶

Furthermore, the US engaged in the global war on terror needs a steady supply chain of rare earths in order to manufacture precision-guided weapons systems. The importance of rare earths in this context was acknowledged in the 2012 statement by the US Senate Armed Services Committee referred to in the 2013 US Congressional Research Service Report entitled 'China — Rare Earth Elements in National Defense: Background, Oversight Issues, and Options for Congress':

Rare earth materials play an essential role in several critical weapons components and systems such as precision-guided munitions, electric ship drives, command and control centers, and aircraft, tanks, and missile systems. The committee notes the predominance of unreliable foreign sources for rare earth materials, including China, which provides roughly 94 percent of the world's rare earth oxides and nearly all rare earth metal within the defense-related supply chain and which has repeatedly decreased export quotas and imposed embargoes of these critical materials. Even with the development of the domestic-supply chain there may be continued reliance on production of certain heavy rare earth elements from China.¹⁴⁷

China, on the other hand, has clearly followed a capacity building strategy for its domestic value-added industries and, essentially, this is what the complainants were arguing in the *China — Rare Earths* and the earlier

¹⁴² *Marrakesh Agreement Establishing the World Trade Organization*, opened for signature 15 April 1994, 1869 UNTS 183 (entered into force 1 January 1995) annex 1B ('*General Agreement on Trade in Services*').

¹⁴³ Chen, above n 137, 225.

¹⁴⁴ *Ibid* 227.

¹⁴⁵ See, eg, Askar Sheibani, 'Rare Earth Metals: Tech Manufacturers Must Think Again, and So Must Users', *The Guardian* (online), 27 March 2014 <<http://perma.cc/W53P-MG2M>>. For an overview, see Tasman Metals Ltd, *Principal Uses of Rare Earth Elements* <<http://perma.cc/XP69-P8TT>>.

¹⁴⁶ See, eg, The State Column, 'Rep Mike Coffman Demands Action on China's Illegal Trade Practices' on *The Kwan Box* (4 March 2011) <<http://perma.cc/DS7S-WECR>>. See also Sandler, Travis & Rosenberg Trade Report, *Lawmakers Urge WTO Action against Chinese Rare Earth Export Restraints* (10 March 2011) <<http://perma.cc/L53M-38FD>>.

¹⁴⁷ Valerie Bailey Grasso, 'Rare Earth Elements in National Defense: Background, Oversight Issues, and Options for Congress' (Report, Congressional Research Service, 23 December 2013) 31.

China — Raw Materials cases.¹⁴⁸ In the case of rare earths exports, by gradually restricting export quotas from 2006 onwards, China was able to divert critical rare earths inputs to its own industries. This enabled it to assume a more competitive posture against the established manufacturing industries based in developed countries that use rare earths. One illustrative example of this strategy is the wind power generation equipment. Between 2006 and 2010, China overtook the US and Germany as the leading user of wind energy by installed capacity (see Table One below).

Table One: Installed Capacity (in Megawatts) of Leading Users of Wind Energy (2006–10)¹⁴⁹

	2006	2007	2008	2009	2010
China	2599	5912	12 210	25 810	44 733
Germany	20 622	22 247.4	23 897	25 777	27 215
India	6270	7850	9587	11 807	13 065.8
Spain	11 630	15 145	16 689	19 149	20 676
US	11 575	16 823	25 237	35 159	40 180

What is even more interesting is that China not only increased its installed capacity but simultaneously developed domestic manufacturing capacity in the sector as well. This is illustrated by the fact that in 2004, 82 per cent of all wind power generation equipment installed in China was of foreign origin. By 2010, domestically manufactured equipment comprised 90 per cent of all new wind power generators.¹⁵⁰ Generous subsidies, incentives and the inward diversion of critical inputs enabled Chinese industries to develop an export-oriented strategy in the wind power sector. China's support measures to the wind power sector were the subject of other dispute settlement proceedings in the WTO which China eventually lost.¹⁵¹

The larger picture paints a 'whack-a-mole' game being played between the US and China. With China's entry into the WTO and the consequent extension of MFN treatment that all WTO members are entitled to, many countries fear erosion of the competitiveness of their industries due to China's immense industrial capacity and aggressive trade policies. While the EU, the US and other developed economies deal with the trade challenges posed by China through the WTO avenue, the fallout of decisions such as that of the *China — Rare Earths* case will have consequences for other developing countries that wish to adopt conservation measures. For example, Indonesia's export restraints on various metals are a subject of a simmering trade dispute with Japan (which imports

¹⁴⁸ See, eg, Gu, above n 12, 775.

¹⁴⁹ The information in Table One is drawn from: World Wind Energy Association, 'World Wind Energy Report 2010' (Report, April 2011); Umair Ghori, 'Risky Winds: Investing in Wind Energy Projects in Pakistan' (2012) 30 *Journal of Energy & Natural Resources Law* 129, 132.

¹⁵⁰ International Centre for Trade and Sustainable Development, *US Proclaims Victory in Wind Power Case; China Ends Challenged Subsidies* (8 June 2011) <<http://perma.cc/Q8WD-XEQF>>.

¹⁵¹ *Ibid.*

nickel from Indonesia).¹⁵² While the matter has not ended up before a WTO dispute settlement panel, the arguments of domestic demand, managing the environment and regulation of mining are being regurgitated again. The lack of clarity in art XX(g) concepts of ‘exhaustible natural resources’ and ‘related to’ means that in the near future, China and Indonesia (or for that matter any other developing country) would be looking over their shoulders for a WTO challenge to their conservation or environmental protection policies.

V THE WAY FORWARD

Part of the problem in clearly defining the concept of ‘exhaustible natural resources’ in art XX(g), is the adoption of a case-by-case, liberal approach in interpretation by the WTO. The evolutionary interpretation approach adopted by the Appellate Body in *US — Shrimp* seems to have resolved one problem but given rise to myriad others. Under this approach the WTO seems to hold anything and everything that is a subject of an art XX(g) dispute as ‘exhaustible’ and a ‘natural resource’ (see analysis in Appendix One below). In doing so, the WTO clearly shoots itself in the foot and ignores the central definitional issue. In ignoring the central definitional issue, the Appellate Body chose the ‘easy way out’ and expanded the meaning of the term ‘exhaustible natural resources’ rather than interpreting the term and settling the central definitional issue once and for all. While we have the benefit of hindsight and can critique this decision having had the opportunity to look at the totality of cases on art XX(g), we must acknowledge the difficult position of the Appellate Body in *US — Shrimp*. However, the decision in *US — Shrimp*, with due respect, was passed without fully appreciating the consequences of an expanded definition of ‘exhaustible natural resources’ on later disputes. The decision clearly derogates from the historical roots of *GATT* and the negotiating parties (as noted by Charnovitz in his analysis referred to in the preceding parts of this article).¹⁵³ The drafters of art XX(g) intended a particular meaning for art XX(g). Not staying faithful to that meaning and intent of the drafters has resulted in the ‘epic mess’ highlighted in this article. In other words, the central definitional issue and lack of clarity in defining ‘exhaustible natural resources’ adds to, and does not resolve, problems for countries in designing conservation regimes.

The evolutionary interpretation method was used by the Appellate Body to fill a definitional gap in the *GATT*. Perhaps the gap left was a deliberate one which is often found in treaty instruments of multilateral character. However, we note that the Appellate Body did not define the term in *US — Shrimp* but was prepared to expand the scope thereof. The Appellate Body reluctance can perhaps be attributed to a lack of any comparable analysis. Therefore, the Appellate Body’s action can be just another way of saying that it doesn’t actually know what

¹⁵² See, eg, Masumi Suga and Ichiro Suzuki, ‘Japan May Take Indonesia to WTO over Curbs on Metal Exports’, *Bloomberg Business* (online), 12 June 2012 <<http://perma.cc/23QY-YKJN>>. See also Dorothy Kosich, *Japan Has No Basis for Filing WTO Nickel Complaint: Indonesian Govt* (14 June 2012) Mineweb <<https://perma.cc/845Y-EHUQ?type=source>>; Ambrose Evans-Pritchard, ‘Indonesia Bans Nickel, Tin and Bauxite Exports’, *The Sydney Morning Herald* (online), 15 January 2014 <<http://perma.cc/9N5T-B5EE>>.

¹⁵³ See Charnovitz, ‘The WTO’s Environmental Progress’, above n 60, 700.

‘exhaustible natural resources’ means but that it is going to expand its meaning and include both mineral resources, biological creatures and anything else that it comes across.

In any case, the question of whether the ‘natural resource’ featuring in the *GATT*/WTO disputes was ‘exhaustible’ or not becomes immaterial when confronted with the fact that all *GATT*/WTO decisions have gone against the restraining countries and in favour of the complainants. Chi’s analysis of the WTO jurisprudence on art XX(g) concludes with the inference that the WTO betrays an institutional bias towards free trade.¹⁵⁴ Chi argues that in pursuit of the aim of free trade, the WTO is constrained to maintain a high invocation threshold for art XX(g).¹⁵⁵ This puritanical approach on free trade by the WTO, which seeks exclusion of environmental or any other non-trade considerations in WTO dispute settlement proceedings, means that developing countries adopting environmental and/or conservational measures face an enormous challenge in balancing their domestic interests with their WTO obligations. In the event of a challenge, developing countries would no doubt have to justify their policies under art XX(g), which, as the above analysis demonstrates, has virtually no chance of success.

Failure to clarify art XX(g) in the *GATT*/WTO jurisprudence means that the artificiality of the case-by-case approach will continue for the foreseeable future. However, the reality is that disputes involving art XX(g) such as the *China — Rare Earths* case and those preceding it are not the last of their kind. It is inevitable that such disputes will emerge from time to time. The WTO must clearly build a mutually acceptable definition of ‘exhaustible natural resources’ and other antecedent elements of art XX(g). Analysis of the *China — Rare Earths* and the preceding cases show that the WTO is unwilling to do so and appears insistent on the adoption of the current approach that is heavily skewed in favour of the complaining countries.

There are several options that might be considered in achieving greater clarity vis-à-vis art XX(g). One option may be abandoning the idea of export control completely. As stated at the outset of this article, the original *GATT* negotiators devoted their attention to eliminating trade barriers and reducing tariffs which clearly results in the import-orientated nature of the *GATT*/WTO framework. The idea, therefore, is not entirely unholy especially when considered in conjunction with the fact that export controls took a backseat in the original *GATT* negotiations of 1947 (the predecessor of *GATT 1994*). There is no provision per se that can be looked upon as the ‘WTO Provision on Export Controls’ rather, the notion of export controls flows intrinsically from the combined effects of *GATT* art XX (General Exceptions) and other provisions such as *GATT* art XI and XXI(b)(iii). This proposition can be confirmed further by a careful dissection of the language used to introduce the General Exceptions contained in art XX. The language does not mention nor indicate that the General Exceptions are actually export controls. The language is sufficiently broad so that it can be used to restrict both exports and imports, provided the requisite criterion contained within the provision is met. Any abandonment of export controls can, therefore,

¹⁵⁴ Chi, above n 74, 963–5.

¹⁵⁵ *Ibid.*

be construed as the WTO members abandoning the ‘idea’ of controlling their exports and letting the market forces decide whether to export or consume their domestically produced inputs.

The idea is certainly attractive in some quarters. Abandonment of export controls would not disturb the organisation of the *GATT*/WTO framework in the sense that it would not require linguistic revision of *GATT* art XX. Additionally, it would be in line with the logical scheme of the *GATT* negotiators (cutting tariffs and reducing trade barriers on imports in order to promote free trade). Abandoning export controls would automatically eliminate the further need to clarify the WTO/*GATT* jurisprudence on art XX(g), particularly on the issues of ‘exhaustible natural resources’. This course of action would indubitably receive support from those supporting free trade.

However, there may be strong counterarguments against such a move. For example, developing countries focusing on domestic capacity building would be reluctant in exporting all of their resources to foreign producers because doing so could potentially deprive access for their nascent industries to domestically produced inputs (China’s development of its wind power industry is a clear example which has been discussed previously in this article). Furthermore, environmental protection concerns and public policy grounds such as protection of public morals or non-proliferation of military technology would always prompt countries to act in a self-centred manner. Therefore, it is unrealistic to assume that export controls can simply be wished away or WTO members can voluntarily undertake not to impose export restraints. This view looks upon export controls as a necessary and indispensable part of domestic trade policy hence, it becomes imperative to ‘fix’ the problems associated with export controls. Consequently, WTO members must determine the root cause of the confusion pervading the use of *GATT* art XX(g). In other words, how can *GATT* art XX(g) be used more effectively so as to achieve a balance between domestic compulsions (such as conservation of natural resources and/or environmental protection) on the one hand and WTO obligations on the other hand. As this article demonstrates, the current state of WTO jurisprudence on the meaning of ‘exhaustible natural resources’ and ‘related to’ requirements under art XX(g) is not only unclear but provides no direction as to how developing countries can construct a WTO compliant export restraint regime based on the aims of environmental protection and/or conservation of natural resources.

The second possible solution could be that the sum of all *GATT*/WTO decisions be consolidated into a separate ‘Export Restraint Agreement’. This is a multilateral, treaty-based approach that adds to the multitude of trade agreements under the aegis of the *Marrakesh Agreement Establishing the World Trade Organization*.¹⁵⁶ There is support for this alternative. For example, Bin Gu considers that the issue of export restraints will be resolved through the route of a multilateral agreement. Gu acknowledges that until recently there was no ‘global appetite’ for a WTO based export restraints regime.¹⁵⁷ Gu also points out the ill-fated attempt by the EU to introduce export restrictions in the WTO

¹⁵⁶ *Marrakesh Agreement Establishing the World Trade Organization*, opened for signature 15 April 1994, 1867 UNTS 3 (entered into force 1 January 1995).

¹⁵⁷ Gu, above n 12, 799.

Non-Agricultural Market Access negotiations.¹⁵⁸ Negotiating a multilateral agreement on export restraints is clearly an improbable solution given the fact that the Doha Round is bogged down and there is no end in sight despite some conscious efforts on all sides of the divide to bridge the gaps. Trade negotiators would obviously be loath to take up another burden on their shoulders when many more pressing issues have been pending resolution since 2001.

The third solution lies within the WTO itself. The ideal opportunity for that solution would be the next trade dispute involving export restraints and art XX(g). It is understandable that the WTO, after all, is a trade promotion organisation and cannot be lumped with the additional responsibility of environmental conservation or other non-trade considerations. Additionally, the dispute settlement panels of the WTO must stay within the ambit of the GATT/WTO framework when adjudicating between the disputing WTO members. However, if this state of affairs continues, there is a clear danger of instituting an undesirable, self-perpetuating cycle where any developing country adopting export restraints is challenged to an expensive dispute settlement process with a predetermined outcome. Clearer treatment of art XX(g) and its antecedent factors would not only help WTO members adopt the 'correct' policies but it would also aid in achieving a level of equilibrium between international trade commitments and environmental conservation.

In exploring the third option, we can retrace our steps back to the cases of *US — Gasoline* and *US — Shrimp* where the disputes centred upon the question of whether exhaustible natural resources include clean air (*US — Gasoline*) and marine creatures (*US — Shrimp*). These two cases provide a reference point where WTO members can consider drawing a distinction between purely environmental conservation measures (such as protecting endangered species or combating air pollution) and conservation of finite natural resources (such as minerals and ores). The distinction can then be made on the basis of a revised model export restraint regime. Venezuela's arguments opposing the US measures in *US — Gasoline* are particularly relevant in developing a revised model on export restraints. Venezuela's argument in the case emphasised the tradability of resources as a defining feature behind conservation measures (see Appendix One below). Using tradability of the resources as a central feature behind a revised art XX(g) interpretation would have the following interlinked advantages:

- (i) Allow the WTO DSB to distinguish export restraint disputes according to its aim: conservation of the environment versus conservation of finite natural resources that carry commercial value.
- (ii) Enable the WTO to act according to its mandate of being a trade promotion organisation as opposed to being an environmental conservation body. Adopting this standard will filter most of the art XX(g) based disputes from the WTO dispute settlement system. Only those disputes concerning measures on resources with tradability would be litigable in the WTO dispute settlement system. Under this course of action, cases with a conservation motive such as

¹⁵⁸ Ibid.

United States — Restriction on Imports of Tuna (1991),¹⁵⁹ *United States — Restrictions on Imports of Tuna* (1994),¹⁶⁰ *United States — Taxes on Automobiles*,¹⁶¹ *US — Gasoline* and *US — Shrimp* may not become maintainable under art XX(g). Appendix One demonstrates that the majority of cases were motivated due to environmental measures that the WTO rejected as non-conforming to the *GATT/WTO* framework. Environmental conservation goals can be accomplished through treaty frameworks such as the *Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade 1998*, the *Cartagena Protocol on Biosafety to the Convention on Biological Diversity 2000* and so forth that would not upset the *GATT/WTO* framework.¹⁶²

- (iii) Adoption of the tradability of resources as a standard for application of art XX(g) would provide a clearer criteria for WTO members in designing a conservation regime that does not breach *GATT/WTO* obligations. Tradability of a resource gives the WTO members a one point test which bypasses the ‘mess’ created by the WTO in interpreting the term ‘exhaustible natural resources’. In other words, instead of a wide-ranging spectrum of ‘exhaustible natural resource’ that includes things such as tuna, dolphins, turtles, polluted air and so forth, the WTO members would simply look at factors such as tradable value, exploitation costs and environmental consequences in designing their conservation regimes. This revised criteria is tighter and gives policymakers in resource rich developing countries a simpler and easy to use ‘grundnorm’ in constructing their trade policies instead of the current case-by-case approach where the WTO expects policymakers to decipher the text of the *GATT* as well as all applicable cases on art XX(g).

The *China — Rare Earths* case contains valuable lessons for developing countries in designing their trade policies. The first lesson is that the case-by-case approach adopted in art XX(g) disputes in both the *GATT* and WTO eras is not only artificial but is proven to be skewed in favour of the complainants. The second lesson is that in absence of clear criteria no matter what policies are constructed to conserve exhaustible natural resources, the end result would be the same if the matter is litigated under the WTO dispute settlement system. Finally, if conservation measures are to be employed as a tool of trade policy, then the WTO member must use these sagaciously. China

¹⁵⁹ GATT Panel Report, *United States — Restriction on Imports of Tuna*, GATT Doc DS21/R (3 September 1991) GATT BISD 39S/155.

¹⁶⁰ GATT Panel Report, *United States — Restrictions on Imports of Tuna*, GATT Doc DS29/R (16 June 1994).

¹⁶¹ GATT Panel Report, *United States — Taxes on Automobiles*, GATT Doc DS31/R (11 October 1994).

¹⁶² *Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade 1998*, opened for signature 10 September 1998, 2244 UNTS 337 (entered into force 24 February 2004); *Cartagena Protocol on Biosafety to the Convention on Biological Diversity*, opened for signature 29 January 2000, 2226 UNTS 208 (entered into force 11 September 2003).

smartly imposed export restrictions to divert critically needed inputs for domestic use knowing full well that such inputs were in high demand overseas. The inward diversion, though temporary, granted sufficient boost to the domestic sector (we have seen above the development of China's wind energy industries that coincided with restrictions on export of rare earths). It seems that after fully exploiting the situation, China has lifted its export quotas and ended export duties on rare earths.¹⁶³ Whether this was in response to China's efforts to comply fully with the WTO decision is unclear. But what is abundantly apparent is the unwanted signal that many resource rich developing countries are getting: export duties can be used to develop domestic capacity as long as no challenge is mounted at the WTO level. While China is in the process of complying with the WTO decision, lifting of export quotas and eliminating export duties may already have done the trick for China.

¹⁶³ See, eg, Chuin-Wei Yap, 'China Ends Rare-Earth Minerals Export Quotas', *The Wall Street Journal* (online), 5 January 2015. See also 'China Scraps Quotas on Rare Earths after WTO Complaint', *BBC News* (online), 5 January 2015 <<http://perma.cc/CZ8E-R3GK>>.

Appendix One: Summary of GATT/WTO Disputes on Interpretation of Article XX(g)

No (GATT/WTO)	Dispute	Resource	Main Interpretation Issue	Comments	Outcome
1 (GATT)	GATT Panel Report, <i>United States — Prohibition of Imports of Tuna and Tuna Products from Canada</i> , GATT Doc L/5198 (22 December 1981, adopted 22 February 1982) GATT BISD 295/91.	Marine creatures (tuna stocks).	Tuna stocks were 'exhaustible'.	<ul style="list-style-type: none"> Parties agreed that tuna stock were 'exhaustible'. The Panel did not interpret the further question of whether tuna stocks were 'natural resources'. 	<ul style="list-style-type: none"> Respondent (US) measures held not justifiable under art XX(g).
2 (GATT)	GATT Panel Report, <i>Canada — Measures Affecting Exports of Unprocessed Herring and Salmon</i> , GATT Doc L/6268 (20 November 1987, adopted 22 March 1988) GATT BISD 35S/95.	Marine creatures (herring and salmon stocks).	Herring and salmon stocks were 'exhaustible natural resources'.	<ul style="list-style-type: none"> Parties agreed that herring and salmon stocks were 'exhaustible natural resources'. US challenged Canada on 'relating to' requirement. The Panel determined herring and salmon stocks were 'exhaustible natural resources' but did not provide any interpretation or explanation on the issue. 	<ul style="list-style-type: none"> Respondent (Canada) measures held not justifiable under art XX(g).

No (GATT/WTO)	Dispute	Resource	Main Interpretation Issue	Comments	Outcome
3 (GATT)	GATT Panel Report, <i>United States — Restrictions on Imports of Tuna</i> , GATT Doc DS21/R (3 September 1991, unadopted) GATT BISD 39S/155.	Marine creatures (conservation measures for dolphins).	Dolphins were endangered marine species due to tuna fishing.	<ul style="list-style-type: none"> Parties disagreed on the meaning of 'exhaustible natural resources'. GATT Dispute Settlement Panel faced the task of interpreting meaning of 'exhaustible natural resources' for the first time. The Panel did not interpret the term 'exhaustible natural resource' but focused only on 'relating to' requirement under art XX(g). 	<ul style="list-style-type: none"> Respondent (US) measures held not justifiable under art XX(g).
4 (GATT)	GATT Panel Report, <i>United States — Restrictions on Imports of Tuna</i> , GATT Doc DS29/R (16 June 1994, unadopted).	Marine creatures (conservation measures for dolphins).	Dolphins were endangered marine species due to tuna fishing.	<ul style="list-style-type: none"> European Economic Community did not disagree on dolphins being endangered but argued that dolphins are not a tradeable resource and therefore cannot be exhausted. GATT Panel did not interpret the meaning of 'exhaustible natural resources', instead focused on the issue of whether a GATT member can take measures on conserving resources located outside its geographical territory. 	<ul style="list-style-type: none"> Respondent (US) measures held not justifiable under art XX(g).

No (GATT/WTO)	Dispute	Resource	Main Interpretation Issue	Comments	Outcome
5 (GATT)	GATT Panel Report, <i>United States — Taxes on Automobiles</i> , GATT Doc DS31/R (11 October 1994, unadopted).	Carbon fuels (conservation measures for a finite source).	Gasoline was derived from petroleum which was an 'exhaustible natural resource'.	<ul style="list-style-type: none"> Panel did not interpret the term 'exhaustible natural resource' but ruled that the dispute was within the purview of art XX(g) because petroleum resources were finite. 	<ul style="list-style-type: none"> Respondent (US) measures held not justifiable under art XX(g).
6 (GATT)	Appellate Body Report, <i>United States — Standards for Reformulated and Conventional Gasoline</i> , WTO Doc WT/DS2/AB/R, AB-1996-1 (29 April 1996).	Clean air (measures on gasoline products).	Measures concerned restrictions on import of gasoline products that caused air pollution.	<ul style="list-style-type: none"> Panel interpreted some dimensions of the question raised by the Respondent (US) whether air constituted a resource that could be exhausted due to pollution. Complainant (Venezuela) argued that air was not a tradeable resource and was renewable. Also, clean air was a condition which could be altered. 	<ul style="list-style-type: none"> Panel held Respondent (US) measures justifiable. Modified by the Appellate Body on appeal. Appellate Body held that the measure was discriminatory and disguised restriction on international trade breaching the chapeau of art XX.

No (GATT/WTO)	Dispute	Resource	Main Interpretation Issue	Comments	Outcome
7 (GATT)	Appellate Body Report, <i>United States — Import Prohibition of Shrimp and Certain Shrimp Products</i> , WTO Doc WT/DS58/AB/R, AB-1998-4 (12 October 1998).	Marine creatures (measures on shrimp and shrimp products).	Measures concerned restrictions on import of shrimp and shrimp products from countries that were not using Turtle Excluder Device in catching shrimp.	<ul style="list-style-type: none"> • Complainants claimed that the focus of art XX(g) was on finite tradeable resources rather than biologically renewable resources. • Respondent (US) pointed out the endangered status of sea turtles as evidence of exhaustibility. • Panel did not interpret the issue of exhaustible natural resources. Panel found US measures unjustifiable under art XX(g). • Appellate Body offered greater clarity on what is meant by ‘exhaustible natural resources’ and ruled that sea turtles were an exhaustible natural resource, covered under art XX(g). 	<ul style="list-style-type: none"> • Appellate Body held that the Respondent (US) measures were ‘unjustifiably’ discriminatory and arbitrary due to lack of procedural fairness. • Appellate Body declared the meaning of ‘natural resources’ as not being ‘static’ and is rather ‘evolutionary’. • Appellate Body also clarified the interpretation of art XX and the relationship between art XX chapeau and the attendant exceptions under art XX(a)–(j).

No (GATT/WTO)	Dispute	Resource	Main Interpretation Issue	Comments	Outcome
8 (GATT)	Appellate Body Report, <i>China — Measures related to the Exportation of Various Raw Materials</i> , WTO Docs WT/DS394/AB/R, WT/DS395/AB/R and WT/DS398/AB/R, AB-2011-5 (30 January 2012).	Raw materials (Bauxite, Coke, Fluorspar, Magnesium, Manganese, Silicon Carbide, Silicon Metal, Yellow Phosphorous, and Zinc).	Measures on exports and price of exports of identified raw materials.	<ul style="list-style-type: none"> • No new interpretation of 'exhaustible natural resources' was issued. • China appealed Panel's finding on 'made effective in conjunction with' requirement under art XX(g). • Appellate Body on appeal held that export restrictions and domestic restraints must work together to achieve the stated conservation goals. 	<ul style="list-style-type: none"> • Panel held that China's export restraints were not justified under art XX(b) and (g). • China did not appeal this finding. • Appellate Body held that China's measures were inconsistent with WTO norms and China's obligations under its <i>Protocol on the Accession of the People's Republic of China</i> ('Accession Protocol').

No (GATT/WTO)	Dispute	Resource	Main Interpretation Issue	Comments	Outcome
9 (GATT)	Appellate Body Report, <i>China — Measures related to the Exportation of Rare Earths, Tungsten, and Molybdenum</i> , WTO Docs WT/DS431/AB/R, WT/DS432/AB/R and WT/DS433/AB/R (7 August 2014).	Raw materials (rare earths, Tungsten and Molybdenum).	Measures controlling exports and quotas on exports of identified rare earth metals.	<ul style="list-style-type: none"> • Parties agreed that rare earths were finite natural resources. • Complainants claimed that the term ‘exhaustible natural resources’ must be taken to mean in raw and unprocessed form and should exclude processed and/or unprocessed materials. • China contended that the product coverage under art XX(g) is broad and could include processed and/or unprocessed materials. 	<ul style="list-style-type: none"> • Panel acknowledged that no internationally agreed definition for ‘exhaustible natural resources’ exists. • Panel ruled that determining the precise meaning of the term ‘exhaustible natural resources’ was not necessary to decide the dispute. • Panel did not make any decision regarding processed and/or unprocessed products as constituting ‘exhaustible natural resources’. • China appealed limited aspects of the Panel’s decision. • Appellate Body ruled China’s measures were inconsistent with WTO norms and China’s obligations under its <i>Accession Protocol</i> (see reasoning in Part III).