
India's National Solar Program: National Objectives Versus International Commitments

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Key Words: National Solar Mission, WTO, DSB, exception clause

The Central and State Government of India are giving a lot of focus on promoting solar power for the growing energy needs of India. To pursue the aim the National Solar Mission named as JawaharLal Nehru Solar Mission was started in 2010. The Solar Mission projected that by 2022, It should provide 100 GW solar capacity. India aimed to be among the top five solar markets in the world. It is expected that India will become the third largest solar market across the globe in 2017.⁴

With the increasing growth of industry and population, There would be a paradigm shift in the energy needs. the government in India had always been encouraging use of renewable sources off energy. Indian government expects that by the end of this decade 40% off the energy needs would be fulfilled by renewable sources. This growth in sustainable energy needs would be supported by major improvements in the role played by renewable sources. this would also help in completing the international commitments meet at Paris agreement.⁵ With the kind of policy changes made by the government, it is expected that by 2030 there should be a major reduction and in greenhouse gas emissions, which maybe 35% below 2005, whereas original commitments stand at 20 to 25 percent.⁶

The developing countries like India need to jump for development by not only making investments, technologies and capital but rather doing all this in sustainable manner. So as per the recent policy the energy needs should comprise of 40% from renewable resources and the remaining 40% should come from coal.⁷

India is facing a developmental crisis and also an environmental crisis.⁸ India could not fulfill the electricity requirements of all the villages And also India faces the problem of different

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kinds of pollution and various issues linked with overdependence on fossil fuels. As the industrial activity picks up and developmental concerns are addressed we find that clearly five emerging trends are seen which will shape our energy policy.

- Cleaner technology is demand of the day.
- Reducing costs of renewable energy and this is particularly true for solar and wind power.
- Enhanced use of electricity for practically all applications. This is true for corporate usage and also the domestic use including automobiles.
- Decreasing the production of Greenhouse gases and reducing the risk of Climate Change *Reduce greenhouse emissions and mitigate climate change*. The Paris Agreement outcome was that the countries agreed to the urgency in reducing greenhouse emissions.
- Global trend towards decreased usage of fossil fuels.

The concept of renewable energy is nascent in India but has a long way with no turning back while comparing it with fossil fuels, many advantages can be seen.⁹ the future in India's energy policy and electricity production lies in the use of renewable sources. there would be structural reforms in the policies for the use of renewable energy, leading a way for clean technology.

In the recent past, India has witnessed various steps being taken for the production of renewable energy and also for building such assets. the national solar machine set up in 2010 is one such effort targeting for electricity generation. the financial requirements were met by inviting investments. India lost a case at the Dispute Settlement Board (DSB) of World Trade Organization against United States (US). A complaint was launched by the United states at Dispute Settlement Board (DSB) regarding the clauses of Government of India. it said that the procurement of solar modules at a local level is considered as Domestic Content Requirement (DCR). so it was not as per the provisions of WTO Article III:4. This article delves on the India –US Solar Dispute Case (DSB 456) and examines the relationship of the trade and environment in section 2.1. The JNNSM and what went wrong in its implementation? What made the US complaint against us and what were the arguments given by the connected parties to their advantage. The same has been discussed in section 2.2. The authors have carried out methodology of doctrinal type and have discussed the efficacy of the arguments. Under the conclusion, the authors argue if India could have taken a different set of arguments under the article XX and suggest a way forward if the argument for an environmental & sustainability law exception could be thought of for the developing countries where there is a continuous struggle to create an equilibrium between growth and issues related to environment.

2.1. Relationship Between Trade and Environment: At a Glance

Trade law jurisprudence has recognised certain linkages between trade and environment. This is evident in the preamble of the WTO, which even though primarily has the objective of increasing and liberalising trade in the goods and services, requires member states to optimally use the world resources, in accordance with the objectives of sustainable development, by *'seeking to protect the environment and to enhance the means of doing so in a manner consistent with the respective needs of the country as per the level of the economic development'*.¹⁰ Even though such objectives have been enshrined in the preamble of the WTO, however, WTO should not be mistaken for an environmental protecting agency.¹¹ It

only seeks to govern the aspects of environmental law which have consequences on the trade relations between the countries.¹²

Such correlation was recognised even in the annals of history by various scholars. They understood that trade measures may have positive and negative environmental consequences.¹³ The impact of trade might be positive to the environment as the resources generated from the efficient allocation of the resources from trade may be used for environmental protection.¹⁴ Such concern were recognised in 1992 Rio Summit, 2002 Johannesburg Summit and 2005 UN World Summit.¹⁵ However with the increase in the production of goods and services, many argued that trade might even lead to environmental degradation. Another correlation that scholars recognised is that certain environmental concerns may be addressed through trade measures.¹⁶

Such concerns were not expressed in the GATT negotiations in the late 1940s, one of the early concerns on the impact of trade and economic growth on the environment was seen with the establishment of *Group on Environmental Measures and International Trade "EMIT Group"* in the 1970s. This group remained dormant during the initial times, however, its establishment incentivised the discourse of the impact of trade on environmental measures and vice versa.¹⁷ It was only in the later years that the Director General of GATT brought about the resolution to reactivate the EMIT group.¹⁸ Another important negotiation towards the linkage of trade and environment was at the Tokyo rounds where states discussed the nature of environmental measures in the form of technical barriers to trade.¹⁹ Another concern with the linkage between trade and environment was expressed by the developing countries. The concern of the developing countries was that on technical grounds pertaining to environment certain products was prohibited to enter the markets of the developed countries; however the same products continued to be imported by the developing countries.²⁰ This led to the formation of "Working Group on the Export of Domestically Prohibited Goods and other Hazardous Substances"²¹

All of these concerns have been buttressed by the developments that have took place in the environmental front, where in 1987 the World Commission on Environment and Development produced the Brundtland Report which coined the term "sustainable development".²² The report was premised on the fact that an increase in the resources caused by the increase in international trade would held in alleviating poverty and help solve all the environmental problems.²³

Moreover, there are several other issues concerning the environment and trade which over deliberated in Uruguay rounds. the issues and challenges related to Environment Protection were also discussed, which can be resolved with the adoption of some specific clauses of the General Agreement on Trade in Services (GATS)²⁴, General Agreement on Tariff and Trade (GATT)²⁵, The Agreement on Agriculture and Sanitary and Phytosanitary Measures²⁶, Subsidies and Countervailing Measures²⁷ and Trade Related Aspects of Intellectual Property Rights²⁸

In 1994, the member states sought for a detailed work program on an international level, pertaining to trade and environment after the Uruguay Round. The *Committee On Trade And Environment*²⁹ was developed to bring the issues of environment and sustainable development in synchronization with the work of WTO.³⁰ It even covered issues which were erstwhile not covered by the EMIT group.³¹ The creation of the CTE has been considered as a success as it conducted public symposia with various civil societies; however it is plagued

with the lack of transparency. The Doha Ministerial Conference, 2001 kicked off negotiations in some aspects of the subject.³²

Hence, even through the annals of history there existed a relationship between trade and environment. This relationship was in tandem and symbiotic wherein environment was given its due regard and trade was also least trade restrictive.

2.2. The Jawahar Lal National Solar Mission (JNNSM); What went wrong?

Under the JNNSM, the objectives of the Government were to create 100 Gw of solar powered grid by 2022. This would give India a kick-start, as an emerging economy leader in solar energy.

The execution of JNNSM would be done in phases and batches. the Government of India post certain Domestic Content Requirement (DCR) Measures.³³ The Solar Power Developers (SDPs) He were asked to supply electricity to the government. As per the clauses there was an agreement for a guaranteed rate of 25 years during which the SPDs would generate electricity at a predetermined price. This was named as the model power purchase agreement (PPAs). once the government receives it, It would be distributed to the ultimate consumers through distribution companies.

The DCR measures imposed by the India on the SPDs to use solar cells and modules produced in India made USA complaint against India at The DSB of the WTO. Their point of contention was that the opponent had gone against some of the important measures of the WTO and challenged the way the JNNSM was carried out. Is it right to settle international Trade disputes with a wider objectives of environment, climate change and energy security. The DSB found the DCR requirements as put up by India against the world trade norms.

2.3. Exploring the Ambit of Article XX (b) and (g)

The GATT treaty obligates the contracting parties to certain norms including its substantive rules, non discrimination obligations,³⁴ quantitative restriction³⁵ etc.

Though there are certain scenarios in which the member states can be given an exemption as an exception.³⁶ one such is mentioned in Article XX of the GATT.³⁷ GATS (General Agreement on Trade in Services) provides a brief on search exceptions. The chapeau of Article XX of the GATT³⁸ states that these exceptions cannot be used as means of “*arbitrary or unjustifiable discrimination between countries where the same conditions prevail*” or as a “*disguised restriction on trade*”.³⁹

For the purposes of the linkage between trade and environment the relevant exceptions are first “*necessary to protect human, animal or plant life or health*” (paragraph (b)), and second “*relating to the conservation of exhaustible natural resources*” (paragraph (g)).⁴⁰ Hence, the provisions of GATT allows for the measures which are trade restrictive but are aimed to protect the environment.⁴¹ It is due to the presence of exceptions mentioned in Article XX of GATT, that the panel and the appellate body have confirmed the right of a member state to determine their own policy protecting the environment.⁴² Hence, even though

²The Doha Declaration explained Available at

https://www.wto.org/english/Tratop_e/dda_e/dohaexplained_e.htm (accessed November 1, 2017)

³ Article I and III of GATT

⁴ Article XX, GATT.

these policies of the government may be trade restrictive for instance, they may have an impact on market access; such policies can be justified in light of Article XX of GATT.⁴³

Hence this party has to prove that *first* that the restriction is part of any one of the exception mentioned in Article XX and *second* the requirement mentioned in the chapeau of Article XX have been met.⁴⁴ Furthermore, this is the sequence with which the panel and the appellate body check the applicability of Article XX of GATT⁴⁵ i.e. first checking whether the exception finds mention in any exception in Article XX and later checking whether the measure satisfies the requirement of the chapeau of Article XX of GATT.⁴⁶

For the interpretation of the exceptions of Article XX, a textual interpretation is sought of the article. Therefore, on a plain reading of the text of the treaty, for the purposes of Article XX(b) of GATT an additional requirement has been mandated to check if the measure is *necessary* to fulfil the policy objective of protecting the human animal or plant life and health and for the purposes of Article XX (g), the measure must be *of relation to and in conjunction with* the conservation of exhaustible natural resources.⁴⁷

The panel and the appellate body is of the opinion that the test of necessity mentioned in Article XX(b) of GATT involves a process of weighing and balancing.⁵ On the one side the impact of the policy measure on international trade is seen, and on the other side the impact of such a measure to achieve the environmental goals and common interest that the measure seeks to achieve.⁴⁸

Previously it was the interpretation of the panel and the appellate body that for a measure to be considered as “necessary” the measure had to be “least trade restrictive” while ensuring the same policy objective of the protection of environment is being fulfilled.⁵⁰ Hence for the purposes of least trade restrictive measure, from all the other trade restrictive measures, the party seeking the support of the exception clause had to prove that the trade restrictive measure was considered to be the least trade restrictive.⁵¹ However, this interpretation of the “least trade restrictive measure” has changed, to the “less trade restrictive measure” where the panel and the appellate body adopt a mechanism of weighing and balancing as previously explained.⁵²

For the purposes of the interpretation of Article XX(g) which has the requirement that the measure must be “relating” to the conservation of the natural resources, the panel and the appellate body are of the opinion that this has to be interpreted as “substantial relationship” rather than mere “incidental or inadvertently aimed at”.⁵³ Further there is an additional requirement on the interpretation of Article XX(g) which requires that the conditions which have been imposed on the imported products should be similarly be placed on the domestic products.⁵⁴ Hence, for the protection of “exhaustible natural resources” which may include both living and non- living resources,⁵⁵ a substantial relationship between the measure and the end goal sought has to be established.

Lastly with respect to the interpretation of the Chapeau of the Article XX, the Appellate body report in the US-Gasoline case was of the opinion that even though discrimination is allowed according to the provisions of Article XX, however, this discrimination should not “arbitrary” and “unjustified”.⁵⁶ For the purposes of adjudicating whether a measure is unjustified a two pronged argument was accepted in US-Shrimp case, *first* whether the member states made an effort to negotiate the measure and *second* whether the measure was flexible. In the same

⁵TRADE AND ENVIRONMENT, AT THE WTO, WORLD TRADE ORGANISATION 63 (2004)

case the appellate body also opined on the interpretation of *arbitrary* as “rigidity and inflexibility”.⁵⁷ Hence, even though Article XX of GATT allows to discrimination, it should fulfil the criteria of arbitrariness and unjustified. The second requirement is that the measure should not be a disguised restriction on trade, for that *first* the measure should be announced publically *second*, it should not be arbitrary or unjustified *third* is that the “the design, architecture and revealing structure” of the measure should not be excessively trade restrictive.⁵⁸

Hence these are the conditions that have to be followed to use the exception mentioned in (paragraph (b))and (paragraph (g)) of Article XX of GATT.

2.4. Arguments In The Solar Panel Dispute

The allegation before the Panel and the Appellate Body was that India was not according the same status to the nationally produced goods and the imported goods and therefore it was departing with its obligation of national treatment which has been mandated under the WTO treaties.⁵⁹ In front of Panel and the Appellate Body, there was an allegation that India holds a violation under the trade related investment measures (TRIMS) and the GATT⁶⁰, with the act of imposing domestic content requirement under the Jawaharlal Nehru national solar mission(JNNSM)

India argued before the panel, that it was allowed to depart from according national treatment as it was saved due to the government procurement exception mentioned in Article III:8(a) of GATT. India, argued this exception as the private entities were selling the electricity to the government bodies. However both the Appellate body and the Panel rejected the argument of India as the ultimate good on being bought and sold was electricity and the domestic content requirement was imposed on solar cells and modules.⁶¹ Another reason for rejecting the argument of government procurement is that according to Article III, government procurement is obtained for “*the procurement by the governmental agencies of products purchased for governmental purposes and not with a view to commercial resale or use in production of goods for commercial sale*”. However in the present case, since the government further resold the electricity to the distribution companies, therefore, it could not be granted the government procurement exception.⁶² The government had been guided by the report in Canada-Renewable Energy, to have this interpretation of government procurement.⁶³

The panel was of the opinion that India could not take refuge in Article III (8) and has gone against the norms of the TRIMS (Article 2.1). The question to be taken up further is that, if the panel was of the opinion that India had flouted its obligations of national treatment then the same was considered to be justified under Article XX of GATT.⁶⁴ India used the exceptions of Article XX(d) which is the general exception – necessary to secure compliance with laws and GATT Article XX(j) which is the general exception for the essential to acquisition or distribution of products in general or local short supply.⁶⁵ It is pertinent to note that India did not use the exception of GATT Article XX (b) and GATT Article XX(g) which are the environmental law exceptions .⁶⁶ There seems to be imminent discord between the

⁶ Jay Sanklecha, Why the WTO s right in the solar panel dispute, March 03, 2016, Available at <http://www.thehindu.com/opinion/columns/why-the-wto-is-right-in-the-solar-panel-dispute/article8305405.ece> (Accessed on November 1, 2017)

environmentalists and the trade specialists in this case and difference of opinion seem to have widened rather than seeing a meeting point.

Conclusion

The US took a position, that itself used many incentives for its own consumers to encourage them to use solar energy and also used the provisions of local content. On one hand US complained that India was misusing the provisions of local content and on the other hand it was also using the same for the initial period of the solar industry development.⁶⁷

The country decided to give a 30 per cent federal tax credit. Consumers could avail the state and local incentives to substantially reduce their costs of solar photovoltaic systems.⁶⁸ There are provisions in which you can avoid the usage of national treatment, but under only certain caveats. For instance, if the solar energy so produced is procured by the government for its own use, it may not fall within the purview of WTO norms of the national treatment. Just to have scalability and for the development of the industry, the government can think of providing incentives to consumers to adopt solar-friendly products. These incentives could be in the form of tax credits. Such tax sops incentivise the consumer to use the product. The industry would also benefit and it would not violate the trade laws.

The multi-lateral trade rules are binding on all WTO member countries. The article III of national treatment essentially applies the rules of non-discrimination between domestic and the imported products. Non-discrimination is the heart of the WTO, whether it is Most Favoured Nation (MFN) or the National Treatment. Unfortunately, despite our commitment towards increase share of renewable energy, India lost this case at the WTO, wherein India was charged to not be in line with the article III (4). India was charged for putting DCR measures in a haphazard manner and therefore it was charged with not adhering to the trade rules and not maintaining the decorum of the institution like WTO. This gave India a major setback amongst the International community.

“The products of the territory of any contracting party imported into the territory of any other contracting party shall be accorded treatment no less favourable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use. The provisions of this paragraph shall not prevent the application of differential internal transportation charges which are based exclusively on the economic operation of the means of transport and not on the nationality of the product.” (article III, National Treatment)⁶⁹ The main charge us was that we had arbitrarily used the provisions and had violated one of the main provisions of WTO. This of course hurt the companies in US who were exporting solar panels to India.

In defence, India tried to give an argument under the article III (8) where the country argued that it was a case of Government procurement. The article III(8) does not hold good when the case is of procuring for its own use. We argued that the violation had not taken place as in this case, the government procures and then goes in for redistribution of electricity.

The panel found India was taking refuge Article XX(j). The judgement given in this case too went against India. The argument of ‘short supply’ was not convincing for the panel, where India was adding laurels for itself by increasing the capacity of solar energy. The view of one of the emerging economies leader is, “job creation is important for us, countries should be able to boost local manufacturing activities without worrying about trade rules.”⁷⁰ The

appellate panel did not allow to take protection under Article XX (d). India wanted to comply with the International commitments particularly for climate change and also the RIO Declaration. Environmentalists like the Vinuales, Harold Samuel Chair of Law and environmental policy at the university of Cambridge has said, “The Indian Solar dispute epitomizes the unresolved tension between the goals pursued by the International community”.

The authors take a viewpoint wherein, a balance between developmental objectives and the environmental objectives has to be struck. By scaling up the solar industry of India, we have a moral objective to give fillip to our own industry. Not that the outside investors cannot join the bandwagon of the available opportunities in India but following our domestic interest’s vis a vis the commitments of the multi- lateral trade rules proved to boomerang on us. The case can be further supported with moral arguments. On the other hand, country’s contribution towards environmental international commitments also have been praise worthy.

With the onset of JNNSM in 2010 India made strategic plans for raising our production capacity of solar energy. Could we have argued our case better with the background of nascent industry argument wherein we argue, that we would like that Indian companies also be part of the Indian growth story and it would be a pity if in such conditions, where we are only relying on foreign companies. The availability of solar energy is in plenty for us and will always be there, still the industry of solar energy could never see the light of the day until the government took effective steps with specific targets. The hand holding had to be done for a period. We have about 5,000 trillion kWh per year incident over India’s land area with most parts receiving 4-7 kWh per sq. m per day.⁷¹ Government has declared it as a thrust sector. Our argument is that, in the scenario of the industry gains strength, we need to give some protection to it for a while so that its participation becomes viable and it is able to work out an experience curve. . Above all the country grapples with the fact that about 400 million people still do not have access to electricity. The power sector which has largely major PSUs. The Government wants private players to come into this sector and for that the nascent industry needs to be given protection for a certain period.

The article on National Treatment is sacrosanct, but it also has exceptions of the regional trading Agreements. The WTO which is the main trade regulatory authority has always given its call on environment preceding the trade. In this case too, precedence has been given to public policy. In the statement in the WTO Trade Report, 2012, the Director General in the forward, calls for a greater co-operation between the public policy measures and the trade rules. The creation of a standards infrastructure for the electricity supply which is using renewable energy and maintains a larger strategy on cleaner technology is a case of public policy measures walking hand in hand with the trade measures, which is so very needed by the emerging economies. The question is that, could the panel pay heed to such urgent needs of emerging economies?

⁷¹ibid