WTO AGREEMENT ON THE APPLICATION OF SANITARY AND PHYTOSANITARY MEASURES AND THE INDIAN EXPERIENCE

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I Introductory

THE FUNDAMENTAL changes in the technology together with the integration of economies have given momentum to the process of globalisation.1 This concept has increased the level of interdependence among countries and has contributed to changes in technology and market liberalisation policies.2 The new market liberalisation policies based on global integration of markets has led to the expansion of international economic and financial relations and has resulted in the growth of international trade.3

Liberalised international trade has ensured effectiveness of the multilateral trading system.4 In the multilateral trading system, production of goods and services in one part of the world and consumers using them in other part of world has changed the dimension of international economic order. All countries particularly the developing countries have become aware of these changes and has diligently participated in the international trading regime. This has naturally led to the demand that their aspirations and requirements should be given a special treatment so that they can effectively participate in the multilateral trading system.5

India as a developing country member has played an important role in the multilateral trading system. With liberalisation, India's external trade flow has experienced growth. During 1991 to 1997, Indian exports have shown drastic increase from Rs 27, 658 crore to about Rs 120,000 crore at an annual rate of over 24 per cent.6 These economic reforms have made India the largest and fastest growing economy at a rate of around 7.3 per cent.⁷

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¹ Deborah Z. Cass, The Constitutionalization of the World Trade Organization 62 (Oxford University Press, Oxford, 2005).

² Kumar Ratnesh, World Trade Organization (WTO) Structure Functions Tasks and Challenges 77 (Deep and Deep Publications, New Delhi, 2004).

³ Geetanjali Sahni, Globalization and Sovereignty of Nation States ³ (Regal Publications, New Delhi, 2007).

⁴ Ross P. Buckley, "The Changing Face of World Trade and the Greatest Challenge Facing the WTO and the World Today" in Ross P. Buckley (ed.) WTO and the Doha Round: The Changing Phase of World Trade 2 (Kluwer Law International, Hague, 2003).

⁵ C. Rangarajan, "Management and Challenges of Globalization" II Fortune Journal of International Management 1, 6-7 (2004).

⁶ Vikram Chadha, "Implications of India's Global Orientation during the 1990s Accomplishments and Pitfally" XXXIV Foreign Trade Review 1, 52-71 (1999).

⁷ Nilanjan Banik, "India's Position in Doha Development Round of WTO: An Assessment" in Shahid Ahmed, Shahid Ashraf et.al., (eds.) Regional and Multilateral Trade in Developing Countries 383 (Routledge Taylor and Francis Group, New Delhi, 2011).

Global free trade is the basic objective and corner stone of the World Trade Organization (WTO). The main purpose of the WTO is to administer new global trade rules.8 Since India is a member of the WTO it has to implement the WTO Agreements and perform its obligation under them.

Sanitary and phytosanitary (SPS) measures have potential to create barrier for exports from the developing countries. The WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) has facilitated trade from the developing countries by improving transparency, promoting harmonisation and preventing the implementation of the SPS measures that cannot be justified scientifically. It has a great significance for the developing countries including India.

Since SPS Agreement came into force, there are several instances where Indian spices and marine products were detained, barred entry and even destroyed on the basis that these imports pose threat to human, animal and plant health in the importing country.¹¹ The costs of implementing requirements and to comply with obligations under the SPS Agreement are extremely high for every developing country including India due to stringent development budgets.¹² In addition to this there is no policy and mechanism in India to assess whether food products derived from biotechnology are safe for consumption.¹³ It is therefore essential to analyze and evaluate the legal framework of sanitary and phytosanitary regime in India and its experience while applying the provisions of the SPS Agreement.

II India and the world trading system

In ancient and medieval period trade and commerce was well developed in India and it was a rich country among its neighbours.14 The economic policies followed by the British transformed the Indian economy into a colonial economy. This disrupted the traditional

⁸ K. Nageshwar Rao, "WTO: A Club of Rich Nations" in Raj Kumar Sen, John Felix *et.al.* (eds.)., *WTO and Asian Union* 126 (Deep and Deep Publications, New Delhi, 2009).

⁹ S. J. Henson, "Impact of Sanitary and Phytosanitary Measures on Developing Countries" *Report of Department of Agricultural and Food Economics of University of Reading*, at 28, available at: http://www.cepaa.esalq.usp.br/pdfs/134.pdf (last visited on April 26, 2012). 10 *Id.* at 32.

¹¹ J. George, "Food Safety Standards and Market Access: Developing Countries get into a New Engagement with Trade" *Presentation made at the National Capacity Building Workshop on "WTO Agreement on Sanitary and Phytosanitary Measures"* on Feb. 27 at New Delhi 3 (2004).

¹² Keith E. Maskus and John S. Wilson, "A Review of Past Attempts and the New Policy Context" in Keith E. Maskus, John S. Wilson *et.al.* (eds.)., *Quantifying the Impact of Technical Barriers to Trade Can it be Done* 10 (University of Michigan Press, Ann Arbor, 2004).

¹³ Biswajit Nag and Debashis Chakraborty, "WTO Ruling on the EU-US Biotech Products Dispute: A Review of the Issues" 9 *Asian Biotechnology and Development Review* 2, 125 (2007).

¹⁴ J. L. Mehta, Advanced Study in the History of Medieval India 71 (Sterling Publishers, New Delhi, 2002).

structure of the Indian economy and its resources and wealth were exploited.15 At present one-fourth of the Indian population lives in absurd poverty in spite of the availability of abundant natural resources in the country. Due to this fact India is still categorised as a low income developing economy.16

The growth of international trade has benefited India and its merchandise export has increased at the rate of 13.8 percent per annum (from \$30.63 billion to \$313.2 billion) during the years 1995-2010.17 It is a most active developing country member and has participated in the trade negotiations at global level. It is therefore essential to analyze the participation of India in the multilateral trade regime.

Role of India in pre WTO trading regime

In 1950s the main objective of India's economic development was to achieve economic growth with the values of social justice. The concept of mixed economy where public and private sectors both exist was introduced as a medium to achieve this goal.18The General Agreement on Tariffs and Trade (GATT) 1947 provided for Most Favoured Nation (MFN) status on trading partners, transparency in global trade and reduction in tariffs.19 This resulted in the introduction of new economic policy under which tariffs were reduced from 150 per cent to 65 per cent.20

The reduction of tariffs during GATT rounds increased the trend of using non-tariff barriers for protectionist policies and for creating barriers to international trade.21 India was a founder member of the GATT and has participated in every trade negotiation held under its framework. It has favoured rule based multilateral trading system and has continuously stressed on the point that implementation of issues and policies should be given top priority by the member countries.22

15 A History Text Book, Modern India 139 (National Council of Educational Research and Training, New Delhi,

¹⁶ The Indian Economy is a developing economy because of the following factors: (i) low per capita income; (ii) large portion of working population is engaged in agriculture; (iii) Population pressure; (iv) Increasing unemployment; (v) Outdated technology and (vi) Poor quality of human capital.

¹⁷ Gaurav Datt and Ashwani Mahajan, Indian Economy 278 (S. Chand and Company, New Delhi, 2015).

¹⁸ S. S. Mehta, "Globalization of the Indian Economy Nature and Consequences" XXIX Foreign Trade Review 2, 197 (1994).

¹⁹ Surinder Sud, "Collapse of Cancun: No deal is Better than an Un-favourable Deal" in S. B. Verma (ed.)., WTO and Development Opportunities 130 (Deep and Deep Publications, New Delhi, 2005).

²⁰ Supra note 18 at 199.

²¹ Paramitra Dasgupta, "Non-tariff Barrier to Trade: The Issue of Technical Standards" XXX Foreign Trade Review 1, 46-66 (1995).

²² P. K. Vasudeva, World Trade Organization Implications for Indian Economy 23 (Pearson Education, Singapore, 2005).

Under GATT both developed and developing countries were in favour of erasing trade barriers in order to boost trade. India like other developing country member was apprehensive about providing access to its economy. In 1980s global economic reforms were introduced and India opened itself for liberalisation. The Uruguay Round enhanced the liberalisation process in India and it became a signatory to the Uruguay Round proposals in 1994.23

Role of India in the WTO regime

The WTO is a biggest trading organisation at the global level. It assists in implementing the Uruguay Round trade agreements, discussing new trade issues and settling trade disputes among the member countries.24 India is a founder member of the WTO and is one of the first signatories of the WTO trade agreements.25 By virtue of being a member of the WTO, India automatically gets MFN status and National Treatment for its exports from other member countries.

It has also actively used the WTO dispute settlement system. Most of the cases which were brought against India involved quarantine restrictions on import of agricultural and industrial products. Disputes with the European Union (EU) were frequent but with the US it was more often a complainant than a defendant.26

The main issues which are important for India have been rights and obligations under the WTO Agreements. It has frequently stated that the developing countries have always been on receiving end due to the protectionist policies followed by the developed countries.27 As a developing country member in the series of negotiations in the WTO it has demanded that multilateral trading system should include following: (i) environment and labour related issues should not be discussed at trade negotiations; (ii) developed countries should impose zero tariffs on labour intensive exports from developing countries; (iii) protection should be granted to biological material and traditional knowledge of developing countries; (iv)

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²³ Vikram Chadha and Satinderjeet Sandhu, "An Analysis of the Nature and Extent of India's Globalization (1970-96)" XXXIV *Foreign Trade Review* 2, 13-24 (1999).

²⁴ Amalesh Banerjee, "WTO and India's Reform Agenda" in S. B. Verma (ed.)., WTO and Development Opportunities 105 (Deep and Deep Publications, New Delhi, 2005).

²⁵ D. N. Konar, "Indian Agriculture during the WTO Regime" in R. K. Sen, John Felix *et.al.* (eds.)., *WTO and Asian Union* 187 (Deep and Deep Publications, New Delhi, 2009). Certain section of people and various political organizations in India were opposing the decision of government due to the following reasons: (a) WTO as a forum protects interests of developed countries; (b) the price of agricultural products which are imported will increase and (c) India cannot match industrial and technological superiority of developed countries.

²⁶ Thomas A. Zimmermann, "WTO Dispute Settlement: General Appreciation and Role of India" in K. Padmaja (ed.)., WTO and Dispute Resolution 157 (ICFAI University Press, 2007).

²⁷ V. K. Bhalla, "World Trade Organization: Converting Crisis into Opportunities" in S. B. Verma (ed.)., *WTO and Development Opportunities* 27 (Deep and Deep Publications, New Delhi, 2005).

agricultural products; (v) tariff on industrial products; (vi) foreign investments; (vii) trade and environment; and (viii) non-tariff barriers including SSP measures.28

The Doha Ministerial Conference has given developing countries a platform to discuss their areas of concern.29 At Doha, India together with other developing countries proposed that Uruguay Round recommendations should be completely implemented after that new issues should be discussed which in turn will contribute to the opening up of bottlenecks and constraints.30 It has suggested following proposals for reviewing the WTO Dispute Settlement Understanding: (i) improving notification requirement for mutually agreed solutions; (ii) strengthening position of developing countries; and (iii) reducing litigation costs.31

The participation of India at Doha is commendable because it succeeded in keeping investment, competition, government procurement and trade facilitation issue out of the framework of the negotiations. It stated that implementation issues under present WTO Agreements should be resolved in time bound manner and interests of the developing countries should be protected.32 Though the Doha Declaration was victory for developing countries including India, a large section of experts has stated that it is both an opportunity as well as challenge.33 International trade together with liberalisation is beneficial to India as it has increased exports, foreign direct investment and reduced poverty and unemployment. Under WTO regime Indian foreign trade has undergone important changes in its composition and quality but it is feared that these are limited.34

It has also been observed that India's access to international markets is limited.35 The rate of exports from India under the WTO has decreased due to supply constraints in the form

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²⁸ C. Rangarajan, *supra* note 5 at 8. Narender Prasad, "World Trade Organization and India: Challenges and Opportunities" in S. B. Verma (ed.)., *WTO and Development Opportunities* 86-87 (Deep and Deep Publications, New Delhi, 2005).

²⁹ Sitesh Bhatia, "Sustainable Development, Trade Liberalization and WTO" in S. B. Verma (ed.)., *WTO and Development Opportunities* 27 (Deep and Deep Publications, New Delhi, 2005).

³⁰ Gaurav Datt and Ashwani Mahajan, supra note 17 at 859.

³¹ Laura E. Carsten, "Global Governance Reform and Emerging Powers: Brazil, India and the WTO Dispute Settlement" *Presented at the ISA Annual Convention Montreal* at 25 (2011), *available at*: http://www.sowi.ruhr.uni_bochum.de/mam/content/lsipkarstensia2011.pdf (last visited on Aug. 28, 2016).

³² P. K. Vasudeva, supra note 22 at 428.

³³ Satender Kumar Joshi, "Doha Meet of WTO: An Assessment" in S. B. Verma (ed.)., WTO and Development Opportunities 166 (Deep and Deep Publications, New Delhi, 2005).

³⁴ Raj Kumar Sen, "WTO after Ten Years and Large Developing Economies like India" in Raj Kumar Sen, John Felix *et.al.* (eds.)., *WTO and Asian Union* 17 (Deep and Deep Publication, New Delhi 2009).

of procedural bottlenecks, distortions in products and lack of infrastructure and storage facilities.36

The exports from India are also subjected to non-tariff barriers in the developed countries. The Indian non-tariff barriers include quality standards and health standards.³⁷ It is important for India to address the issue of non-tariff barriers including sanitary and phytosanitary measures in trade negotiations so that free trade is promoted.³⁸ Under the SPS Agreement it is required that the domestic SPS standards should be based on MFN and National Treatment principles.³⁹ The Indian government has taken all indispensable steps to meet the requirements of the SPS Agreement. It involves harmonization of regulations, developing standards on the basis of international norms and development of technical skill and infrastructure.⁴⁰

III Sanitary and Phytosanitary regime in India

The sanitary and phytosanitary regime in India consists of sanitary and phytosanitary regulations based on scientific and technically improved testing and certification procedures supported by the framework involving ministries and departments of the government.41 In addition to this there are specific organisations and agencies to supervise the effective implementation of these regulations.42

Protection of human health

³⁶ Abdul Wahab, "India's Export under the WTO Regime: An Assessment" in Anil Kumar and Nageshwar Sharma *et.al.* (eds.)., *WTO and India* 32 (Deep and Deep Publications, New Delhi, 2007).

³⁷ Katherine Baldwin and Joanna Bonarriva, "Feeding the Dragon and Elephant: How Agricultural Policies and Trading Regimes Influence Consumption in China and India" at 13, *available at:* http://www.usitc.gov/journals/Feeding-the-Dragon-and-the-Elephant.pdf (last visited on July 10, 2012).

³⁸ Prahalathan S. Iyer, "RTAs: The Way Forward for India" in Shahid Ahmed, Shahid Ashraf *et.al.* (eds.)., *Regional and Multilateral Trade in Developing Countries* 262-263 (Routledge Taylor and Francis Group, New Delhi, 2011).

³⁹ Rajesh Chadha and Drusilla K. Brown, "Computational Analysis of the Impact on India of the Uruguay Round and the Forthcoming WTO Trade Negotiations" *Paper is part of collaborative program of CGE modeling research beginning in 1994 between the National Council of Applied Economic Research (NCAER), New Delhi, and the University of Michigan, Ann Arbor 5 (2000).*

⁴⁰ R. K. Khetarpal and Kavita Gupta, "Sanitary and Phytosanitary Measures: Implications on India and other Developing Countries" in A. K. Vasisht, Alka Singh *et.al.* (eds.)., *WTO and New International Trade Regime Implications for Indian Agriculture* 149 (Agricultural Economics Research Association, New Delhi, 2003).

⁴¹ K. S. Money, "The Challenges and Opportunities of Sanitary and Phytosanitary Standards Cost and Benefits of Strategies of Compliance" *Country Paper- India Presented at Specialist Meeting for Asia at Beijing (Hosted by the Chinese Government and Sponsored by World Bank)* on Nov. 20, 2014 at 2.

⁴² N. N. Varshney, "Sanitary and Phytosanitary Measures" in A. K. Vasisht, Alka Singh *et.al.* (eds.)., *WTO and New International Trade Regime Implications for Indian Agriculture* 228 (Agricultural Economics Research Association, New Delhi, 2003).

Food safety is the most important issue in the regulation of both international and domestic sanitary measures.43 The law responsible for providing healthy and safe food to consumers has existed in India from a very long time. At present the central government and the state governments control the food safety system in India. The following laws and regulations are responsible for food safety in India: (a) Prevention of Food Adulteration Act, 1954; (b) Fruit Products Order, 1955; (c) Meat Food Products Order, 1973; (d) Vegetable Oil Products (Control) Order, 1947; (e) Edible Oils Packaging (Regulation) Order, 1998; (f) Solvent Extracted Oil, De Oiled Meal and Edible Flour (Control) Order, 1967; (g) Milk and Milk Products Order, 1992; (h) Vegetable Product Control Order, 1976; (i) Agriculture Produce (Grading and Marketing) Act, 1937; (j) Bureau of Indian Standards Act, 1986; (k) Export Quality Control and Inspection Act, 1963; and (1) Essential Commodities Act, 1955.44The aim of these legislations is to regulate sanitary requirements and to lay down minimum requirements for the following: (a) sanitary conditions of premises, surrounding environment and for workers; (b) water which is used for processing; (c) machinery and equipment; (d) product standards; and (e) preservatives, additives and contaminants for various products.45

The Ministry of Agriculture, the Ministry of Food Processing Industry, the Ministry of Health and Family Welfare, the Ministry of Commerce, the Ministry of Civil Supplies, Consumer Affairs and Public Distribution, the Ministry of Rural Development (Directorate of Marketing and Inspection) and the food safety departments of respective state governments are responsible for implementing these legislations.46 These governmental agencies are responsible for the following purposes: (a) review of existing standards; (b) finalization of standards; (c) identification of area where there is requirement of applying new standards; (d) assessment of the quality of food technology; and (e) formation of standards relating to chemical content, physical characteristics, contaminant levels and additive levels in food.47

⁴³ Geraldo S. de Camargo Barros and Heloisa Lee Burnquist, "SPS in Agricultural Trade: Issues and Options for a Research Agenda" *Paper presented at the International Seminar "Agricultural Liberalization and Integration: What to expect from the FTAA and the WTO?" hosted by the Special Initiative on Integration and Trade, Integration and Regional Programs Department, Inter-American Development Bank, Washington DC*, on 1-2 Oct. 2002 at 54, *available at:* http://www.cepa.esalq.usp.br/pdf/sps_agro_trade_set02.pdf (last visited on Oct. 15, 2016).

⁴⁴ Supra note 42.

⁴⁵ Kajli Bakshi, "SPS Agreement under the WTO: The Indian Experience" at 9-10, available at: http://www.idfresearch.org/pdf/sps-agreement.pdf (last visited on July 10, 2016).

⁴⁶ K. S. Money, supra note 41 at 2.

⁴⁷ Kajili Bakshi, *supra* note 45 at 11.

The Prevention of Food Adulteration Act, 1954 is the basic food safety legislation and its aim is to prevent adulteration of food.48 The Central Committee for Food Standards (CCFS) established under this Act assists government at centre and states with respect to the administration of this Act.49 It has a broad based representation from various ministries, food scientists, food quality control experts and representatives from trade and consumer sectors.50 The CCFS has played an active role in the process of commodity and product standard formulation as well as to fix limits for food contaminants such as pesticides residues, mycotoxins, heavy metals and food additives such as preservatives, antioxidants and emulsifiers.51 The Central Government has power to establish one or more Central Food Laboratory under the provisions of this Act.52

The Central Food Laboratory in addition to the functions prescribed by the Prevention of Food Adulteration Act, 1954 also performs following functions: (i) it analyzes food samples sent by any officer or authority authorized by the Central Government for the purpose and submission of the certificate; (ii) it investigates for the purpose of fixation of standard of any article of food; and (iii) it investigates in collaboration with the laboratories of public analysts in various states and other laboratories which the Central Government has approved for the purpose of standardising methods of analysis.53

The Prevention of Food Adulteration Act, 1954 is implemented by the states and the union territories through inspectors and public analysts.54 The food inspectors operate at the market, industry and during transportation and distribution of food items at the state level. The inspectors have authority to take samples from the moving van, market place, industries, warehouses and can stop or seize the food under question. The food inspectors make inspections and take samples in accordance with the food regulations and submit it for analysis.55 The public analysts, analyzes the samples and submit their findings and report.56

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⁴⁸ Prevention of Food Adulteration Act, 1954 is the most active and dynamic food legislation in South Asia due to its frequency of amendments and coverage of food standards. It was amended in 1964, 1976 and 1986 respectively to fill the gaps and to provide more teeth to its provisions. ⁴⁹*Id.*, s. 3.1.

⁵⁰*Id.*, s. 3.2.

⁵¹ Tika Bahadur Karki, "Sanitary and Phytosanitary (SPS) Measures in SAARC Countries" *Discussion Paper* V+ 43 of South Asia Watch on Trade Economics and Environment Kathmandu and Centre for International Trade Economics and Environment Jaipur at 9 (2002).

⁵² Supra note 48, s. 4.

⁵³ Prevention of Food Adulteration Rules, 1955, Rule 3.

⁵⁴ Supra note 48, s. 8, 9, 22-A, 23 and 24.

⁵⁵ Supra note 48, s. 10 and 11. Prevention of Food Adulteration Rules, 1955, Rules 8 and 9.

⁵⁶ Supra note 48, s. 13. Prevention of Food Adulteration Rules, 1955, Rules 6 and 7.

The cases are filed before the magistrate on the food samples that do not comply with the set standards. The cases are settled and decided for forfeiture or destruction of the food items or its disposal. The penalty for violating Prevention of Food Adulteration Act varies from a fine of Rs 5,000 to a maximum of lifetime imprisonment.57 The presence of multiple regulatory agencies has created problem in the implementation of the human health regulations.58

The Food Safety and Standards Act, 2006 was enacted by the Government of India under the aegis of the Ministry of Health and Family Welfare.⁵⁹ This legislation has consolidated all existing laws governing food safety regulations such as Prevention of Food Adulteration Act, 1954, Livestock Importation Act, 1898, Milk and Milk Products Order, 1992 and Fruit Products Order, 1955. The aim of this legislation is to provide a single reference point for all kinds of food safety standards in India.⁶⁰

The Food Safety and Standards Authority of India (FSSAI) has been established under the Food Safety and Standards Act, 2006.61 The function of FSSAI is to set standards based on science for food items in order to ensure availability of safe and wholesome food for human consumption.62 It regulates manufacturing, storage, distribution, sale and import of the food products.63

In 2014, food safety department of Delhi government stated that rice served in food outlets namely KFC, Sagar Ratna and Bikanerwala are harmful for consumption due to the presence of tartrazine a harmful artificial colour. The rice samples were collected by FSSAI and sent to testing centre. The tests confirmed that tartrazine was not present in the samples and hence rice served in these food outlets was held safe.64

Similarly in 2015, FSSAI issued an advisory that Blue Bell Creameries ice cream is injurious to health as it contains bacterium *Listeriamonocytogenes* which weakness the immune system

⁵⁷ Supra not 48, s. 16, 16-A, 17, 18, 19, 20, 20-A, 20-AA and 21.

⁵⁸ Kajli Bakshi, supra note 45 at 10.

⁵⁹ The aim of the Act- "is to consolidate the laws relating to food and to establish the Food Safety and Standards Authority of India for laying down science based standards for articles of food and to regulate their manufacture, storage, distribution, sale and import, to ensure availability of safe and wholesome food for human consumption and for matters connected therewith or incidental thereto".

⁶⁰ Ida M. Conway, Trade Barriers in Asia and Oceania 109 (Nova Science Publishers, New York, 2007).

 $^{{\}small 61\ Food\ Safety\ and\ Standards\ Act,\ 2006,\ s.\ 4,\ 5,\ 6,\ 7,\ 8,\ 9,\ 10,\ 11,\ 12,\ 13,\ 14,\ 15.}\\$

⁶² *Id.*, s. 16 and 17. FSSAI is evaluating 11000 food additives for safety- "FSSAI May Ban Harmful Food Additives after Probe" *Hindustan Times*, May 25, 2016.

⁶³ Ida M. Conway, supra note 60 at 109.

⁶⁴ Soibam Rocky Singh, "KFC, Sagar Ratna Rice Unsafe: HC Told" Hindustan Times, Dec. 5, 2014.

and causes gastrointestinal distress. Finally the Blue Bell Creameries recalled its products from the Indian market.65

In 2012, FSSAI recommended that use of potassium bromate a cancer causing agent should be stopped while manufacturing bread.66 It also decided to set facilities in metropolitan cities to ensure quality of milk and milk products.67

Sometimes the recommendations of FSSAI are ineffective due to the long drawn process associated with the notification procedure and lack of consensus regarding any scientific fact.68 The definition of food as provided in the Food Safety and Standards Act is also very wide. According to the provisions of this Act 'food' means any substance whether processed, partially processed or unprocessed which is intended for human consumption and includes primary food to the extent defined in clause zk.69 Under the Act it is now mandatory to have a licence for carrying any type of food business.70 It also provides for labelling requirements of packed food items where manufactures name, manufacturing date, expiry date and nature of product is to be specified on packing.71 The seller of unlabelled food items can be penalised and such food items can be ceased by the authorities.72

The Food Safety and Standards Act, 2006 is an important step for streamlining food safety regulations in India. But at the same time the implementation of this legislation is a challenge with respect to regulation of the domestic sector. The reason for this is that, there is a large majority of unorganised sector dealing in food business and regulating this unorganised sector is a tedious job.73

65 "Food Safety Body Issues Alert over Blue Bell Products" Pioneer, May 18, 2015.

69 Food Safety and Standards Act, 2006, s. 3 (j) – ('Food' means any substance, whether processed, partially processed or unprocessed, which is intended for human consumption and includes primary food to the extent defined in clause (zk), genetically modified or engineered food or food containing such ingredients, infant food, packaged drinking water, alcoholic drink, chewing gum, and any substance, including water used into the food during its manufacture, preparation or treatment but does not include any animal feed, live animals unless they are prepared or processed for placing on the market for human consumption, plants, prior to harvesting, drugs and medicinal products, cosmetics, narcotic or psychotropic substances: Provided that the central government may declare, by notification in the Official Gazette, any other article as food for the purposes of this act having regards to its use, nature, substance or quality and Section 3 (zk) 'primary food' means an article of food, being a produce of agriculture or horticulture or animal husbandry and dairying or aquaculture in its natural form, resulting from the growing, raising, cultivation, picking, harvesting, collection or catching in the hands of a person other than a farmer or fisherman.

^{66 &}quot;Cancerous Bread Tangled up in Red Tape" Hindustan Times, June 11, 2016.

^{67 &}quot;FSSAI's Bid to Ensure Quality of Milk, Its Products" Pioneer, Sep. 9, 2015.

⁶⁸ Supra note 66.

⁷⁰ Id., s. 31 (1).

⁷¹ Id., s. 23.

⁷² Id., s. 48 to 67. "No Check on Sale of Unregulated Kebabs in Srinagar" Daily Excelsior, Jan. 11, 2016.

⁷³ Kasturi Dass, "Addressing the SPS Challenges in India" *Centre of WTO* Studies, at 33 (2008), *available at:* http://www.wtocentre.iift.ac.in/Papers/SPS_Papers_CWS_August%202009_Revised.pdf (visited on Jan. 23, 2014).

The Export Inspection Council (EIC) is responsible for the pre-shipment inspection and certification of consignments which are to be exported. This agency of the Government of India was established as the official pre-shipment and certification body under the Export Quality Control and Inspection Act, 1963.74 It provides Food Safety Management Systems based certification on the basis of international standards on Hazard Analysis Critical Control Point (HACCP) and Good Management Practice (GMP) for ensuring quality in the food processing. Food Safety Management System certification is mandatory for marine products, egg based products and dairy products.75

The Marine Products Exports Development Authority (MPEDA) was established in 1961 and it functions under the Ministry of Commerce. The main aim of the MPEDA is to encourage seafood exports by focusing primarily on five areas namely capture fisheries, aquaculture, processing infrastructure and value addition, market promotion and quality control.76 It has promoted the implementation of HACCP system in seafood processing plants and has guided them to prepare HACCP manuals.77 It also sets limits for the residues.78

Protection of animal health

The natural barriers restrict the free movement of animals from one region to another. The species of animals living in a particular region are adapted to the pathogens which are native of that region. Due to the movement of people and goods from one region to another these pathogens cross over to foreign habitat and behave abnormally causing disease and infection in host animals, poultry and aquatic life.79 India has a vast wealth of animals and fishes which form an important component of its trade both at domestic and international level. Therefore to have an efficient mechanism for protecting animal health should be its top

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⁷⁴ Available at: http://www.eicindia.gov.in/About-EIC/About-US/About-US.aspx (last visited on Nov. 3, 2016).

⁷⁵ Aparna Sawhey, "Quality Measures in Food Trade: The Indian Experience" at 334, *available at*: http://www.msmestartupkit.com/sites/default/files/knowledge-base/best-partice (visited on July 10, 2012).

⁷⁶ Available at: http://www.mpeda.com (last visited on Oct. 24, 2016).

⁷⁷ Aparna Sawhey, supra note 75 at 340.

⁷⁸ Civil Service Chronicle, Vol. XXV, No. 9 at 67 (2014).

⁷⁹ In China and Taiwan there was outbreak of White Spot Syndrome Virus (WSSV) affecting cultured shrimps. The other species of shrimp got infected resulting in its outbreak in Japan, Korea, Malaysia and India. It finally engulfed the entire Asian continent. A fungus named *Aphanomycesinvadans* caused Epizootics Ulcerative Syndrome in fishes in Asia. It soon spread over to Australia and parts of Africa. The spread of Bovine Spongiform Encephalopathy (BSE) in United Kingdom (UK) resulted in killing of 4.4 million cattle for precautionary purposes and was disastrous for UK beef trade. The outbreak of bird flu (avian influenza) resulted in the death of over 30,000 birds in India. Foot and Mouth Disease (FMD) is endemic in India and unrestricted movement of livestock plays an important role in its spread. India has in past experienced huge economic loss due to FMD. Refer Stephen S. Morse, "Factors in the Emergence of Infectious Diseases" 7-15 (1995), *available at:* https://wwwnc.cdc.gov/eid/article/1/1/pdfs/95-0102.pdf (last visited on June 7, 2016).

priority.80 The Constitution of India provides obligation on state to organise animal husbandry on modern and scientific lines and to take every step for preserving and improving animal breeds.81

The Livestock Importation Act, 1898 regulates the imports of livestock and livestock products in a manner that such imports do not cause infectious and contagious diseases in the animal population of the country.82 Livestock Importation (Amendment) Ordinance, 2001 amended the Livestock Importation Act, 1898. This amendment has been made to regulate the import of livestock products in such a manner that these imports do not affect human and animal health.83 The Department of Animal Husbandry, Dairying and Fisheries (DAHDF) has power under Livestock Importation Act, 1898 to regulate trade in livestock and livestock products in order to prevent spread of diseases and pathogens.84 It is also responsible for matters relating to livestock production, preservation, protection and improvement of stocks.85

The import of livestock products is allowed subject to the Sanitary Import Permit (SIP), which is guided by risk analysis done through veterinary health certificates to be accompanied with the import of livestock products. The DAHDF issues SIP for livestock products which is valid for one year or six months depending upon the nature of the product. The Sanitary Import Permit is not a licence but a certificate certifying sanitary requirements of India.86 On July 7, 2001 the Department of Animal Husbandry, Dairying and Fisheries issued a notification to regulate the import of following livestock products: (i) meat and meat products of all kinds including fresh, chilled and frozen meat; (ii) egg and egg powder; (iii) milk and milk products; (iv) bovine, ovine and caprine embryos including ova or semen; and (v) pet food products of animal origin.87

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^{80 &}quot;Sanitary and Phytosanitary Agreement of the World Trade Organization: Advantage India" *Policy Paper No. 12 National Academy of Agricultural Sciences* 9 (2001).

⁸¹ The Constitution of India, Directive Principles of State Policy, art. 48.

⁸² Livestock Importation Act, 1898, Preamble- "to make better provision for the regulation of the importation stock, whereas it is expedient to make better provision for the regulation of the import live-stock which is liable to be affected by infectious or contagious disorders".

^{83 &}quot;Customs Clearance Procedure for Food Items, Livestock Products, Plant and Plant Materials" at 64, available at: http://www.taxindiaonline.com (visited on Nov.24, 2016).

⁸⁴ Livestock Importation Act, 1898, s. 3 and 3A.

⁸⁵ Available at: http://www.dahd.nic.in/about-us/functions (visited on Sep. 24, 2016).

^{86 &}quot;The Definition and the Functions of the Trade Unit" at 1-2, *available at:* http://www.sip.nic.in/Files/Functions%20of%Trade%202_new%20%201.pdf (last visited on May 24, 2016). Also refer Department of Animal Husbandry, Dairying and Fisheries notifications S.O. 1495(E) and 1496(E) dated 10th June, 2014 and notification S.O. 2666(E) dated Oct. 17, 2015. No livestock product can be imported without the valid Sanitary Import Permit (SIP) - Notification S.O. 655 (E) dated July 7, 2011.

All livestock products are imported in India only through seaports and airports situated in Delhi, Mumbai, Kolkata and Chennai because Animal Quarantine and Certification Service (AQCS) stations are located only at these places.88 The objective of AQCS is to: (i) prevent the entry of livestock and poultry diseases as per as provisions of Livestock Importation Act, 1898; (ii) implement central government orders and notification in force on importation and exportation of livestock and livestock products; (iii) provide an internationally accepted certification service for augmenting export; and (iv) act as defence force against ingress of exotic disease of veterinary importance by regulating, restricting, prohibiting the import of livestock and livestock products. It also issues No Objection Certificate for import of companion animals (only pet dog and pet cat), animals (birds, mammals, fish and reptiles), animal products and finished leather and Health Certificate/Export Fitness Certificate on standard format for the facilitation of exports of live animals.89

Fishing is a primary livelihood for the people living in the coastal areas. It plays an important role in the economic activity of India by its contribution to national income, food and employment generation.90The Indian Fisheries Act, 1897 regulates fisheries in both riverine and inshore waters.91 It prohibits the use of dynamite and other explosive substance in fishing and provides for imprisonment and fine.92 It also prohibits the use of poison, lime and noxious material in water for catching fish.93 Under this Act the state government has power to make rules for prohibiting and regulating the following matters: (a) erection and use of fixed engines; (b) construction of wiers; and (c) dimension and kind of nets to be used and the mode of using them.94

The other Indian enactments which govern the marine fisheries sector are: (a) the Maritime Zones Act, 1976; (b) the Maritime Zones of India (Regulation of Fishing by Foreign Vessels)

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⁸⁸ Anjani Kumar, "India's Livestock Sector Trade: Opportunities and Challenges under WTO Regime" *Policy Paper 24 National Centre for Agricultural Economics and Policy Research* at 20 (2009), *available at:* http://www.ncap.ves.in/%5cupload_files%5cpolicy_papers%5Cpp24.pdf (visited on May 24, 2016). *Supra* note 84 at 66.

^{89 &}quot;Animal Quarantine and Certification Services" at 1, available at:

http://www.menziesbobba.com/Images/animal_quarantine.pdf (visited on May 11, 2016).

⁹⁰ R. Sathiadhas and Shyam S. Salim, "Marine Fisheries Management in India: Policy Initiative" in Shyam S. Salim, R. Narayan Kumar *et.al.* (eds.)., *World Trade Agreements and Indian Fisheries Paradigms: A Policy Outlook* 144 (Manual Central Marine Fisheries Research Institute, Kochi, 2012).

⁹¹ Indian Fisheries Act, 1897, s. 2.

⁹²*Id.*, s. 4.

⁹³ *Id.*, s. 5.

⁹⁴*Id.*, s.6, 6.3 (a), 6.3 (b) and 6.3 (c).

Act, 1981; (c) the Maritime Fishing Policy, 2004; and (d) the Maritime Zones of India (Regulation of Fishing by Foreign Vessels) Rules, 1982.95

On the basis of existing international agreements a draft legislation on 'Live Aquatic Organisms Importation Act, 2006' has been proposed for the international movement of aquatic animals. There is a greatest need of this legislation because it will strictly implement the provisions needed in safeguarding the existing conservation and management of aquatic animal diseases and biodiversity in Indian fisheries.96Though protection of animal health is the priority of government and there are various laws and regulations regulating it, many diseases like foot and mouth disease (FMD) sometimes have become endemic in various parts of the country.97

In order to improve and make the framework of animal health protection more effective in India following steps should be taken: (i) pest risk assessment, eradication camps and measures to maintain disease free areas should be taken for diseases which impede international trade; (ii) reports on zoonoses should give the number of cases reported for a particular disease in addition to informing the occurrence of such disease; (iii) mode of issuing sanitary and phytosanitary certificate for export of meat and fish products in various parts of country should be harmonized; and (iv) laboratories and testing centers should be improved and provided adequate infrastructure to meet the international standards.98 Non regulatory mechanism should also be introduced to provide support to regulatory measures by serving as additional tools for regulating welfare and health of animals, birds and fisheries.99

Protection of plant health

After independence India achieved self sufficiency in food due to advanced developments in the agriculture. 100 Plants are the foundation of agriculture. Most countries depend on imported variety of crops and seeds for improving their agricultural productivity.

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⁹⁵ R. Sathiadhas and Shyam S. Salim, supra note 90 at 144-145.

⁹⁶ K. K. Vijayan and N. K. Salil, "Introduction to Exotics and Trans-boundary Movement of Aquatic Organism: Policy Requirements and Relevance to Indian Aquaculture in the Post-WTO Scenario" in Shyam S. Salim, R. Narayan Kumar *et.al.* (eds.)., *World Trade Agreements and Indian Fisheries Paradigms: A Policy Outlook* 131 (Manual Central Marine Fisheries Research Institute, Kochi, 2012). Also refer Fishery Survey of India website http://www.fsi.gov.in. (last visited on

⁹⁷ R. K. Khetarpal and Kavita Gupta, supra note 40 at 169.

⁹⁸ Supra note 80 at 6.

⁹⁹ Jessica Vapnek and Megan Chapman, *Legislative and Regulatory Options for Animal Welfare* 33 (Food and Agriculture Organization, Rome, 2010) *available at*: http://www.fao.org/docrep/013/i907e/i907e01.pdf (last visited on June 24, 2015).

¹⁰⁰ For developments in Indian agriculture refer Amarnath Tripathi and A. R. Prasad, "Agriculture Developments in India since Independence: A Study of Progress, Performance and Determinants" 1 *Journal of Emerging Knowledge and Emerging Markets* 1, 63-92 (2009).

This global movement of plant varieties sometimes leads to the introduction of pests and diseases in the host ecosystem.

Plant quarantine is therefore essential for protection of indigenous flora from devastation due to the introduction of exotic pests and pathogens. It consists of government enacted laws designed to regulate the imports of products that carry pests or pathogens. It is based on the following fundamental principles: (i) it should involve biological principles; (ii) it should not impede trade; (iii) it should derive from adequate law and authority; (iv) it should be modified in case of any changes in the conditions; and (v) the objectives of quarantine should be reasonable to achieve.

India has a history of plant quarantine regulations. The Government of India in 1911 constituted a committee to look for the measures which could be taken to protect indigenous plant varieties from threat of Mexican boll weevil (*Anthonomus grandis*). The committee submitted following recommendations: (i) plant imports should be fumigated; (ii) import of plants should be permitted at specified ports only; and (iii) all living plants should be fumigated with hydrocyanic acid gas at entry places. 102

The Directorate of Plant Protection, Quarantine and Storage, was established under the Ministry of Food and Agriculture in 1946. In the same year Indian Agricultural Research Institute (IARI) started its plant quarantine activity with the initiation of 'Plant Introduction' scheme in the botany division. 103 The Division of Plant Quarantine was created in National Bureau of Plant Genetic Resources (NBPGR) in 1978 and the first plant quarantine and fumigation station was inaugurated in 1951.104 The regulations for protecting plant health in India include Destructive Insects and Pests Act, 1914, Insecticide Act, 1968, Plants Fruit and Seeds (Regulation of Import in India) Order, 1989, Plant Quarantine (Regulation of Import in India) Order, 2003, Seeds Act, 1966 and Foreign Trade (Development & Regulation) Act, 1992, 105

¹⁰¹ Howard E. Waterworth and George A. White, "Plant Introductions and Quarantine: The Need of Both" 68 *Plant Diseases* 1, 87 (1982).

¹⁰² Raj Vijay Laxmi, "Plant Quarantine: An Effective Strategy of Pest Management in India" 2 Research Journal of Agriculture and Forestry Science 1, 11 (2014).

¹⁰³ The unit was further expanded as 'Plant Introduction and Exploration Organization' in the botany division in 1956 and later developed as 'Division of Plant Introduction' in 1961. In 1976 the 'Division of Plant Introduction' was upgraded to an independent institute 'National Bureau of Plant Introduction' and was rechristened in 1977 as 'National Bureau of Plant Genetic Resources (NBPGR)', available at: Zonal Technology Management and Business Planning and Development Unit ICAR- Indian Agriculture Research Institute website, available at: http://www.ztmbpd.iari.res.in/?q=content/national-bureau-plant-genetic-resources (lastvisited on March 24, 2016).

¹⁰⁴ Raj Vijay Laxmi, supra note 102 at 11-12.

¹⁰⁵ R. K. Khetarpal and Kavita Gupta, supra note 40 at 170.

The Sea Customs Act, 1878 was inadequate to regulate the importation of plants.106 Therefore, Destructive Insects and Pests Act, 1914 was enacted to regulate the introduction and importation of any insect, pest and fungi which can be destructive to crops in India.107

Under the provisions of Destructive Insects and Pests Act the officers of the custom department are empowered to implement the rules framed under this Act.108 The Act empowers the Government of India to: (a) prohibit or regulate the export from a state or union territory or transport within state or union territory from of any class of articles likely to cause infection to any crop or of insects; (b) make rules for detention, inspection, disinfestations or destruction of any insect; and (c) regulate the powers and duties of the officers whom it may appoint.109 The Act provides for penalties for wilful violations of rules but these are applicable to the domestic quarantine only.110 It also provides for confiscation of the goods.111

The Plant Quarantine (Regulation of Import in India) Order, 2003 has made mandatory for the imports to have phytosanitary certificates. Following are its main objectives: (i) to prohibit, regulate and restrict the imports of plants or plant materials for both consumption and propagation; (ii) to prohibit or regulate the import of genetically modified organisms and transgenic plant material for research purposes; (iii) to prohibit the import of weed species; (iv) to regulate the import of living insects, fungi, microbial cultures and bio control agents; and (v) to regulate import of timber, bulk shipment of food grains, soil and sphagnum moss.112

The Directorate of Plant Protection, Quarantine and Storage (DPPQS) under the Ministry of Agriculture is the nodal agency for setting phytosanitary standards and to certify that plants and plant products exported from the country are free from pests.113 The Directorate carries out following functions: (i) inspection of imported agricultural commodities for prevention of exotic pests and diseases through implementation of Destructive Insects and Pests Act, 1914 and Plant Quarantine (Regulation of Import in India)

¹⁰⁶ Sea Customs Act, 1878, s.19.

¹⁰⁷ Destructive Insects and Pests Act, 1914, Preamble- "it is expedient to make provision for preventing the introduction into India of any insect, fungus or other pests, which is or may be destructive to crops".

¹⁰⁸ Destructive Insects and Pests Act, 1914, s. 4.

¹⁰⁹ S. R. Wadhi, "Current Status and Future Requirements of Plant Quarantine in India" 52 Proceeding of Indian National Science Academy 1B, 168-169 (1986).

¹¹⁰ Destructive Insects and Pests Act, 1914, s. 5A.

¹¹¹ Section 4 of the Destructive Insects and Pests Act, 1914 provides that a notification issued under Section 3 shall operate as if it has been issued under s. 19 of the Sea Customs Act, 1878, which in turn provides for the confiscation of the goods imported in contravention to the rules enforced. S. R. Wadhi, *supra* note 109 at 177.

¹¹² Kaili Bakshi, supra note 45 at 13-14. Also refer website of Directorate of Plant Protection, Ouarantine and Storage, available at: http://www.ppqs.gov.in(last visited on Aug. 10, 2016).

¹¹³ *Supra* note 80 at 4.

Order, 2003; (ii) inspection of plants and plant material meant for export under the requirements of International Plant Protection Convention; (iii) detection of exotic pests and diseases for their containment by adopting domestic quarantine regulations; (iv) issues phytosanitary certificates relating to phytosanitary conditions and origin of consignments of plants and plant products; (v) distribution of information within the country regarding pests and the means of their prevention; and (vi) conducts research and investigation in the field of plant protection.114

The DPPQS for performing above functions have started plant quarantine activities at major airports and seaports. It has established plant quarantine stations at Delhi, Amritsar, Calcutta and Chennai but these stations lack qualified technical manpower and resources to function effectively.115 In addition to the quarantine services provided by DPPQS, the Government of India has also approved National Bureau of Plant Genetic Resources (NBPGR) for the introduction of plant material of various crops for experimental purposes. It has developed adequate quarantine facility to ensure that plant materials are free from pests and diseases. In case of detection of any pest or pathogen the material is adequately disinfected.116 The Division of Plant Quarantine at NBPGR performs following functions: (i) it quarantines processing of plants and plant materials under international exchange; (ii) it supports research to develop techniques for detection of germplasm; and (iii) it forms policy on bio security issues.117

The Directorate General of Foreign Trade issues license before export of any living organism or their product from the country under the Foreign Trade (Development & Regulation) Act, 1992.118 The Wildlife (Protection) Act, 1972 has provisions which deal with the protection of specified plants.119 The Ministry of Environment & Forests is empowered to regulate export and import of biological material from the country under the Biological Diversity Act, 2002.120

The government has also laid emphasis on the non regulatory mechanism for plant quarantine. It has advocated application of Integrated Pest Management to minimise the use

¹¹⁴ Available at: http://www.ppqs.gov.in/PlantQuarantine.htm#Obj (last visited on Aug. 24, 2016).

¹¹⁵ Supra note 80 at 4-5.

¹¹⁶ S. R. Wadhi, *supra* note 109 at 167.

Given under the mandate section of the Division of Plant Quarantine, available at: http://www.nbpgr.ernet.in/Divisions_and_Units/Plant_Quarantine.aspx (visited on Aug. 24, 2016).

¹¹⁸ Foreign Trade (Development and Regulation) Act, 1992, s. 7, 8 and 9.

¹¹⁹ Wild Life (Protection) Act, 1972, s. 17A to 17H.

¹²⁰ K. S. Varaprasad and N. Sivaraj, "Status of Invasive Alien Species as Threat to Indian Agriculture" Paper Presented in Workshop organised by Acharya N. Ranga Agricultural University and Andhra Pradesh Biodiversity Board on May 19, 2009 at 5. Biological Diversity Act, 2002, Chapter II, Regulation of Access to Biological Diversity.

of harmful pesticides as well as to protect human health and environment from their hazards. Under this programme, the farmers are being trained to grow disease resistant crops and manage pests and diseases with need based use of chemical pesticides and insecticides. The use of bio-pesticides is encouraged by simplifying the registration process and by allowing their commercialization during the period of provisional registration.121

The plant quarantine measures are essential for protecting health of domestic floral life but its effective implementation is important. The Indian plant quarantine system has following defects: (i) lack of efficient services of plant quarantine at the state level; (ii) lack of effective state border plant quarantine check posts; (iii) lack of coordination between various agencies; and (iv) lack of testing facilities at micro level.122

The plant quarantine regulations for destructive pests like fluted scale, san jose scale, coffee berry borer, banana bunchy top virus, potato cyst nematode, potato wart and apple scale are not adequate because these pests have destroyed crops at much larger scale.123 The multiplicity of laws regulating human, animal and plant health has created problem in their effective implementation.

Indian traders have experienced sanitary and phytosanitary related problems in exporting products in the markets of various countries. These products include spices, tea, ground nuts, cotton fabrics, fruits, floriculture, meat, poultry products, milk and milk products, marine products and leather products. Therefore, India has frequently stated that sanitary and phytosanitary measures are the greatest impediments to its exports.124

IV Sanitary and Phytosanitary measures and the Indian exports

India is an important member of the world trading community. It is the largest producer of some foods products in the world. The size of India's food market is above Rs 250 billion and its exported goods are worth Rs 1450 million.125 The major products exported from India include meat, fish, cereals, tobacco, apple, pine apple, mangoes and grapes. 126

^{121 &}quot;Report of the Twenty-Third Session of the Asia and Pacific Plant Protection Commission" Held at Kuala 4^{th} and 8th Malaysia between August 2003 13, available at http://www.fao.org/docrep/008/ae947e/ae947e00.htm (last visited on June 5, 2015).

¹²² Raj Vijay Laxmi, supra note 102 at 15.

¹²³ R. K. Khetarpal and Kavita Gupta, *supra* note 40 at 165.

¹²⁴ Surender Sudd, supra note 19 at 135.

¹²⁵ Kajili Bakshi, supra note 45 at 6.

¹²⁶ Pran Krishna Pal, "WTO and Indian Agriculture: Problems and Prospects" in Raj Kumar Sen, John Felix et.al. (eds.)., WTO and Asian Union 164 (Deep and Deep Publications, New Delhi, 2009).

Developed countries from time to time have imposed various sanitary and phytosanitary measures to prevent exports from the developing countries.127

Between 1995-99 Indian exports consisting of tea, shrimps, fruits, vegetables, milk, ground nuts, and buffalo meat were not allowed in Germany, European Union (EU), United States(US) and Saudi Arabia on health grounds. Similarly Japan, Australia and China had banned import of grapes and mango from India on the basis of presence of fruit flies. 128

Case of agricultural products

India has an advantageous geographical location which enables it to supply agricultural products in the markets of Europe and West Asia.129 The major agricultural items which are exported from India are rice, wheat, maize, oilseeds, sugar, cotton, tea, coffee and spices. The European countries and Russia are the largest importers of Indian tea and coffee, whereas most of the rice is exported to Gulf countries particularly to the Saudi Arabia.130

In 2014, the EU banned the import of Indian mangoes on the basis that they are infected with pests which could harm indigenous European crops. In 2015, the ban was lifted after officials of EU Food and veterinary office stated that appropriate measures have been taken by India to eradicate the pests.131 EU has also banned egg plant, bitter gourd and snake gourd after consignments of these items were found infested with non European fruit flies.132

The Indian basmati rice was also subjected to import restrictions because London's Pesticide Safety Directorate stated that it contained high level of fumigants namely methyl bromide and ethylene di bromide.133 The import of spices from India was detained by Spain, Italy and Germany on the basis that they contain aflatoxin and pesticide residue.134 Germany has also restricted the import of tea on the basis that the pesticide level is more than the prescribed level.135 Netherlands and Japan had also imposed ban on importation of cut flowers from India on the basis that such imports are infested with pests which are harmful to

¹²⁷ Gaurav Datt and Ashwani Mahajan, supra note 17 at 852.

¹²⁸ Supra note 126 at 164.

¹²⁹ *Supra* note 40 at 167.

¹³⁰ Supra note 75 at 333.

^{131 &}quot;Nine Months on, EU Pulps India Mango Ban" Hindustan Times, Jan. 21, 2015.

[&]quot;Our Aam and their Tang" *The Indian Express*, Jan. 30, 2015.

133 Debashis Chakraborty, "Non-Tariff Barrier on Indian Primary Exports" *Rajiv Gandhi Institute of Contemporary Studies (RGICS) Working Paper Series*, Number 27, 29 (2001).

¹³⁴ V. G. Dhanakumar, "SPS Dimensions of WTO and Emerging Competencies in Agriculture and Plantation" in P. Rameshan (ed.)., WTO, India and Emerging Areas of Trade Challenges and Strategies 146 (Excel Books, New Delhi, 2008).

¹³⁵ Supra note 41 at 3.

humans and lack fumigation. 136 Several animal and poultry products exported by India were subjected to ban in the markets of various countries.

Case of animal and poultry products

India has a potential to export beef, poultry and dairy products. The challenge to India's dairy exports is the SPS measures of developed countries which are more stringent and in most of the cases are higher than international standards.137

The EU, Gulf countries and Indonesia has not allowed the import of meat from India on the ground that, cattle in India is infected with foot and mouth diseases. India proposed that EU standards with respect to meat are stringent than the international standards. The meat exports from India are also subjected to Bovine Spongiform Encephalopathy (BSE) detection tests though there was no case reported in India.138

The Indian Poultry products, poultry samples and egg powder were banned by Korea, Australia, New Zealand, Malaysia and EU on the basis of following points: (i) pasteurisation of albumen should be done at 57 degree Celsius and not by dry heat treatment which is applied in India; (ii) pesticide residue is above the prescribed limit in the products; (iii) egg processing plants do not apply hygienic practices; and (iv) veterinary certificates issued by competent authorities do not have force in foreign markets. 139

The EU restricts the import of milk and milk products from those countries where outbreak of foot and mouth disease was reported. The import of Indian milk products was restricted though it was impossible for authorities to monitor each animal and milk producing unit.140 These products are also restricted by other countries in spite of the fact that India has a food safety management system based on certification for export of milk and milk products.141 Indian marine products were also subjected to stringent sanitary and phytosanitary measures.

Case of marine products

¹³⁶ Supra note 133 at 28.

¹³⁷ Francis Guana Sekar, "WTO and Agri Business: An Asian Union for Dairy Sector" in Raj Kumar Sen, John Felix *et.al.* (eds.)., *WTO and Asian Union* 626 (Deep and Deep Publication, New Delhi, 2009).

¹³⁸ Kasturi Das, "Coping with SPS Challenges in India: WTO and Beyond" 11 *Journal of International Economic Law* 4, 978-979 (2008).

¹³⁹ Interim Findings, *Non-tariff Barriers faced by India and Policy Measures: A Study* 34-35 (Department of Commerce Economic Division, 2001).

¹⁴⁰ Sumedha Upadhaya, "The SPS Agreement and Harmonization – A Challenge" 8 *Amity Law Review* 2, 75 (2012).

¹⁴¹ Kasturi Dass, supra note 138 at 981.

India exports several kinds of fish and fishery products. Earlier fish exports were mainly dried, canned and frozen fish but at present such exports consists of fresh frozen and cooled frozen products mostly shrimps.142 Among marine products which are exported shrimp accounts for about 88% of the quantity.143

The EU had banned import of sea food from India in 1997 on the basis that it is substandard and infected by cholera and *salmonella* bacteria. It also stated that sea food is subjected to unhygienic treatment at processing units.144

Recently Indian marine products were banned by European countries on the ground that the level of antibiotic residues was more as compared to prescribed level. Similarly, Japan has restricted the import of shrimps on basis of non freshness, presence of foreign bodies and unhygienic practices.145

Indian marine export has increased with the introduction of advanced facilities and HACCP based quality control measures coupled with regulatory functions of the Marine Products Export Development Authority (MPEDA).146 It has earned highest foreign exchange since 1991 and has immense potential for growth.147

India in many situations has restricted the imports of countries on the basis of sanitary and phytosanitary requirements. It has restricted the import of bovine semen from Canada on the assessment that BSE could be transmitted through bovine semen. 148 It has in past imposed stringent SPS measures on milk products imported from United States due to the presence of *paratuberculosis*. It imports only those pork products which have been certified to be free from *atrophic rhinitis*, *ceptospirosis* and anthrax. It has banned poultry products during the outbreak of Avian Influenza. As far as agricultural products are concerned it has maintained zero tolerance level for pests, weeds and fungi. 149

India lacks infrastructure for producing processed products at a large scale. Though it is second largest producer of fruits and vegetables in the world only 2 percent of it is processed. Similarly, it is the largest producer of milk but only 15 percent of it is processed. 150

¹⁴² Aparna Sawhey, supra note 75 at 332.

¹⁴³ R. Haridoss, "WTO and Agricultural Exports from India" in Raj Kumar Sen, John Felix *et.al.* (eds.)., *WTO and Asian Union* 240 (Deep and Deep Publication, New Delhi, 2009).

¹⁴⁴ Supra note 133 at 25.

¹⁴⁵ Supra note 138 at 977-978.

¹⁴⁶ Aparna Sawhey, supra note 75 at 337-341.

¹⁴⁷ Ibid., p. 332.

¹⁴⁸ Palle Krishna Rao, WTO Text and Cases 46 (Excel Books, New Delhi, 2005).

¹⁴⁹ United States Trade Representative, Report on Sanitary and Phytosanitary Measures 53-54 (2013).

¹⁵⁰ Kajali Bakshi, supra note 45 at 6.

In order to reduce the instances where Indian products were banned in other countries, it is necessary to upgrade system of compliance with the specified sanitary and phytosanitary measures. In many cases lack of availability of timely information have restricted exporters from complying with a particular sanitary and phytosanitary measure and has resulted in the detention of products in the importing country.151

India has opposed any attempt to use CODEX, OIE and IPPC as a backdoor route to strengthen SPS standards. It has always emphasized on increased participation of the developing countries in the standard setting organizations.152

In order to ensure safety and quality of food products the Indian government has taken following steps: (a) increasing the awareness among exporters about sanitary and phytosanitary requirements; (b) encouraging exporters to improve and upgrade their facilities; (c) harmonizing domestic food regulations on the basis of international standards; (d) increasing the credibility and accountability of Export Inspection Council (EIC); and (e) taking assistance of good offices of WTO.153 The Union Food Ministry has allocated Rs 32 crore budget to modernize slaughter houses so that Indian meat exports are not banned on the basis of its inferior quality and contamination.154

In the SPS Committee India has made following submissions: (a) transparency provision of the SPS Agreement is ineffective; (b) inadequate time is given to certain member countries for raising objections; (c) sufficient information is not given through notification procedure; (d) the SPS Agreement has not precisely defined the situation when a standard should be considered as an international standard; (e) developing countries do not get adequate opportunity to respond to the proposed SPS measures and has advocated for reasonable interval between publication and coming into force of the SPS measure; (f) developing countries are not able to participate effectively in standard setting process due to technical and financial constraints; (g) standard setting procedures at CODEX, OIE and IPPC should be uniform; (h) sanitary and phytosanitary measures should be harmonized in countries where similar conditions prevail and where immunity level of population is somewhat similar; (i) notification should contain details of risk assessment methodology and factors which are taken into account for determining appropriate level of SPS protection; (j)

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¹⁵¹ *Id*. at 9.

¹⁵² Parashar Kulkarni, "Non-tariff Barriers and NAMA Negotiations: Developing India's Negotiating Position" in Anil Kumar Thakur, Nageshwar Sharma *et.al.* (eds.)., *WTO and India* 205 (Deep and Deep Publication, New Delhi, 2007).

¹⁵³ Aparna Sawhey, supra note 75 at 340.

¹⁵⁴ Sunanda K. Datta Ray, "Chopsticks in Beefy Boom" Asian Age, April 2, 2013.

producers should be given sufficient time to adapt to new SPS requirements of importing country; and (k) some countries have introduced more stringent food safety standards.155

US government has stated that India's sanitary and phytosanitary measures affecting almonds, apples, bovine genetics, dairy products, pulses, poultry, forest products and food derived from biotechnology should be based on science. It has also stated that several sanitary regulations implemented by India are not based on CODEX and OIE regulations.156

Various agencies are responsible for implementing sanitary and phytosanitary regime in India but the role of central government (Government of India) is immense in cases where exported products are banned in other countries on the basis of SPS requirements. In such situation the government can seek the help of WTO Dispute Settlement Body (DSB).India is one of the most active developing country users of the WTO dispute settlement system. It has developed an intense dispute activity with the United States.157 In most of the cases it has been more often a defendant than a complainant.158

The SPS Agreement has established a structured procedures for the settlement of disputes between members countries regarding the application of sanitary and phytosanitary measures that impede trade. 159 *India-Agricultural Products Case 160* is an important dispute between India and United States involving the provisions of the SPS Agreement.

V India-agricultural products case

The *India-Agricultural Products Case* between India and US is another addition to the high profile disputes involving chicken trade wars which has now become a common scenario in the international trade. 161

Facts

Avian Influenza (AI) also known as 'Avian Flu' or 'Bird Flu' is an infectious viral disease of birds. It spreads to domestic poultry and causes large scale outbreak of serious diseases. Sometimes, it over shoots the species barriers and infects human beings causing

¹⁵⁵ Sumedha Upadhyay, supra note 140 at 73.

¹⁵⁶ Supra note 60 at 108.

¹⁵⁷ Thomas A. Zimmermann, *supra* note 26 at 157.

¹⁵⁸ Pushpa Trivedi, "Globalization and Trade Dispute Settlement in WTO: Implications for Developing Countries with Special Reference to India" at 13, available at: http://www.ppl.nl/bibliographies/wto/files/5302.pdf (visited on Aug. 15, 2011).

¹⁵⁹ S. J. Henson, supra note 9 at 32.

Panel Report, *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/R and Add.1, adopted 19 June 2015, as modified by Appellate Body Report WT/DS430/AB/R. Appellate Body Report, *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/AB/R, adopted 19 June 2015. WTO Dispute Settlement Reports and Arbitration Awards- as at 24th June 2016, *available at:* http://www.wto.org/english/tratop_e/dispu_e/citations_e.doc (visited on July 1, 2016). In James J. Nedumpara, "Public Health Concerns and Trade Regulation: The Avian Influenza Dispute" II *Law and Policy Brief* 1, 1 (2016), *available at:* http://www.jgls.edu.in/PDF/Volume-2-Issue-1-January-2016.pdf (visited on June 21, 2016).

disease or subclinical infections.162 The dispute involved those Avian Influenza (AI) measures which India has imposed on agricultural products imported from countries where Avian Influenza has been reported.163India has maintained these AI measures through Livestock Importation Act, 1898, Livestock Importation (Amendment) Act, 2001 and by Notification S.O. 1663(E) issued by the Department of Animal Husbandry, Dairying and Fisheries.164The US challenged India's AI measures on the basis that these measures are inconsistent with the provisions of the SPS Agreement.165

Earlier consultations were held between India and United States on 16th and 17th April, 2012.166 These consultations were unsuccessful in resolving the dispute. Therefore, on 11th May 2012 the United States requested the establishment of a panel and the Dispute Settlement Body established it on June 25, 2012.167

Panel report168

The US reported in its panel request that India's AI measures are inconsistent with the provisions of the SPS Agreement in the following manner: (i) inconsistent with article 2.2 due to the fact that these measures are not applied only to the extent necessary to protect human and animal health and are also not based on scientific principles and scientific evidence; (ii) these measures cannot be categorised as provisional measures under Article 5.7; (iii) inconsistent with article 2.3 as these measures arbitrarily discriminate between members where similar conditions prevail and result in disguised restrictions on international trade; (iv) inconsistent with article 3.1 as these measures are not based on risk assessment techniques; (vi) inconsistent with article 5.2 as India failed to take into account available scientific evidence; (vii) inconsistent with article 5.6 as these measures tend

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¹⁶² Panel Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/R, para. 2.6.

Panel Report on India – Measures Concerning the Importation of Certain Agricultural Products, WT/DS430/R, para. 2.1.

¹⁶⁴ Panel Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/R, para. 2.22. Notification S.O. 1663(E) prohibits import of livestock and their products from countries reporting Avian Influenza and also prohibits the import of wild birds except those reared and bred in captivity.

¹⁶⁵ Panel Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/R, para. 3.1.

¹⁶⁶ DSU, art. 1 and 4. SPS Agreement, art. 11. GATT 1994, Article XXII.

¹⁶⁷ DSU, art. 6 and 7.1.

¹⁶⁸ Panel Report, *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/R and Add.1, adopted 19 June 2015, as modified by Appellate Body Report WT/DS430/AB/R. Refer WTO Dispute Settlement Reports and Arbitration Awards- as at 24th June 2016, *available at:* http://www.wto.org/english/tratop_e/dispu_e/citations_e.doc (visited on July 1, 2016).

to be more trade restrictive than required to achieve appropriate level of sanitary protection; (viii) inconsistent with article 6.1 as India has failed to assess the sanitary situation of those areas in United States from where imports have originated; (i) inconsistent with article 6.2 as India has not recognised disease free areas or areas of low disease prevalence; and (j) information provided by India is not in accordance with article 7 and paragraph 2 and 5(a) – (d) of annex B.169 India stated that its measures do not violate any provision of the SPS Agreement and the panel should dismiss the claim of the US.170

With respect to the question whether India's AI measures fall under the category of sanitary measures, the panel stated that Livestock Act and Notification S.O. 1663(E) are applied for protection of animal and human health from Avian Influenza. Therefore, they are sanitary measures in accordance with the annex A (1) (a) through (c) of the SPS Agreement and also qualify as 'laws', 'decrees' or 'regulations' as defined in the second sentence of Annex A (1) of the SPS Agreement.¹⁷¹

The panel further stated that AI measures imposed by India are inconsistent with the provisions of the SPS Agreement in following manner: (a) they are not based on the relevant international standards and are therefore inconsistent with article 3.1; (b) they are not based on risk assessment and risk assessment techniques and hence are inconsistent with article 5.1; (c) they are inconsistent with article 2.2 since they are not based on scientific principles and are maintained without scientific evidence; (d) they arbitrarily discriminate between India and other member countries where similar conditions prevail and are applied in a manner which constitutes disguised restrictions on international trade and are therefore inconsistent with article 2.3 and article 5.5; (e) they are inconsistent with article 6.1 and 6.2 since they are not adapted to the sanitary characteristics of the areas from where products have originated and has failed to recognise the concept of disease free areas and areas of low disease prevalence; (f) they have failed to allow reasonable interval between publication of notification S.O. 1663(E) and its coming into force and therefore are inconsistent with annex B.2; (g) they are inconsistent with annex B.5 (b) as other members were not informed through WTO secretariat at the early stage of the proposed notification S.O. 1663(E); and (h)

¹⁶⁹ Panel Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/R, para. 3.1.

¹⁷⁰ Panel Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/R, para. 3.3. The third parties included Argentina, Australia, Brazil, European Union, Guatemela, Japan, China, Colombia, Ecuador and Vietnam.

Panel Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/R, paras 7.154, 7.159.

since they are not in accordance with annex B.2, Annex B.5 (a) (b) and (d) therefore, they are inconsistent with article 7 of the SPS Agreement.₁₇₂

With respect to the claim of US made under article XI of the GATT 1994, the panel stated that: 173

India's AI measures are inconsistent with Articles 3.1, 5.1, 5.2, 2.2, 2.3, 5.6, 6.1, 6.2, and 7 as well as Annex B(2) and Annex B(5)(a), (b) and (d) of the SPS Agreement, the panel declines to rule on the United States' claim under Article XI of the GATT 1994

The panel concluded that India's Avian Influenza measures has acted as barriers to US agricultural products including poultry and are in violation with respect to its obligations under articles 2.2, 2.3, 3.1, 5.1, 5.2, 5.6, 6.1, 6.2, 7 as well as annex B.2 and annex B.5 (a) (b) and (d) of the SPS Agreement. Therefore panel recommended that India should bring AI measures in conformity with these provisions.174 The panel further stated that: 175

Under Article 3.8 of the DSU, in cases where there is infringement of the obligations assumed under a covered agreement, the action is considered prima facie to constitute a case of nullification or impairment of benefits under that agreement. Accordingly, we conclude that to the extent that India has acted inconsistently with the specified provisions of the SPS Agreement, it has nullified or impaired benefits accruing to the United States under that agreement

The officials welcomed the panel decision and stated that American farmer's interest has been safeguarded by the ruling. After the panel ruling the Indian officials stated that ruling will destabilise the Indian poultry industry and they will appeal against the ruling and refer it to the appellate body.176

Panel Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/R, paras 7.275, 7.318, 7.319, 7.334, 7.472, 7.479, 8.1.

Panel Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/R, para. 8.4.

Panel Report on India – Measures Concerning the Importation of Certain Agricultural Products, WT/DS430/R, para. 8.6.

Panel Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/R, para. 8.5.

[&]quot;India Loses Poultry Battle with US at WTO" *Hindustan Times*, available at http://www.hindustantimes.com/business-news/India-loses-wto-dispute-over-bird-flu-airbs.on.us.poultry/article/-1275369.aspx (last on visited on Oct. 29, 2016).

Appellate body report177

India appealed against the panel report and on January 26, 2015 notified to the Dispute Settlement Body that it intends to appeal certain issues of law and legal interpretations covered in the report.178

With respect to the panel's findings that India's AI measures are inconsistent with articles 2.2, 5.1 and 5.2 of the SPS Agreement, India concluded that scientific evidences submitted by it establishes the risk of trade and fulfils the requirements of article 2.2 of the SPS Agreement. It further stated that separate risk assessment is not required under Articles 5.1 and 5.2 of the SPS Agreement.

India stated that analysis of the panel with respect to the relationship between article 6.1 and article 6.7 is incorrect and inconclusive. It stated that in case of harmonious reading of articles 6.1 and 6.3, it should be taken that exporting member should first make a formal proposal under article 6.3. After such proposal is made the importing member should take into account the factors outlined in the second sentence of article 6.1. It requested the appellate body to reverse the findings regarding these provisions. 180

India further raised the following arguments before the appellate body: (a) it stated that its AI measures are not inconsistent with articles 5.6 and 2.2 of the SPS Agreement because the US failed to present a *prima facie* case under article 5.6; and (b) it challenged the panel's consultations with individual experts on Avian Influenza surveillance regime with particular respect to India's domestic measures and disease situation.181

US requested the appellate body to uphold the panel findings that India's AI measures are inconsistent with articles 2.2, 3.1, 3.2 and 5.6 of the SPS Agreement. It stated that India has not been able to establish that panel has erred and the panel's findings are consistent with articles 2.2, 5.1 and 5.2.182 It argued that while analyzing its claims under article 6 of the SPS Agreement, panel did not committed any legal errors. It further concluded that India do not

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¹⁷⁷ Appellate Body Report, *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/AB/R, adopted 19 June 2015. Refer WTO Dispute Settlement Reports and Arbitration Awards- as at June 24, 2016, *available at*: http://www.wto.org/english/tratop_e/dispu_e/citations_e.doc (visited on July 1, 2016).

¹⁷⁸ Appellate Body Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/AB/R, paras 1.1, 1.15.

¹⁷⁹ Appellate Body Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/AB/R, para. 2.11.

¹⁸⁰ Appellate Body Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/AB/R, paras 2.33, 2.34.

¹⁸¹ Appellate Body Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/AB/R, paras 2.38, 2.43, 2.44.

¹⁸² Appellate Body Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/AB/R, paras 2.38, 2.56, 2.80.

recognize the concept of pest- or disease- free areas and areas of low pest or disease prevalence.183

With respect to inconsistency of AI measures with article 2.3 of the SPS Agreement, the US stated that India's appeal is without merit and requested the appellate body to reject these claims of error and uphold that these measures are inconsistent with article 2.3.184

The appellate body stated that during the interpretation of the articles 6.1 and 6.3 of the SPS Agreement, the panel has not made any mistake with respect to the application of law. Therefore, India AI measures are inconsistent with articles 6.1 and 6.3 of the SPS Agreement. 185 It also ruled that while examining claims under article 5.6 of the SPS Agreement, the panel should ascertain the respondent's appropriate level of protection on the basis of the totality of the arguments and evidence on record. 186

The appellate body ruled that panel has not acted inconsistently while conducting objective assessment of the matter under article 11 of the Dispute Settlement Understanding and in findings with respect to the United States claims under article 2.3 of the SPS Agreement.187

The findings of the appellate body can be summarised in the following points: (a) with respect to articles 2.2, 5.1 and 5.2 of the SPS Agreement, the panel has not made any error with respect to the interpretation of these provisions and in understanding the relationship between article 2.2 on one hand and articles 5.1 and 5.2 on the other hand; (b) with respect to articles 3.1 and 3.2 of the SPS Agreement, India's AI measures were inconsistent with Article 3.1 and India was not entitled to benefit from the presumption of consistency of its AI measures with other relevant provisions of the SPS Agreement and the GATT 1994 as provided under article 3.2; and (c) with respect to article 6 of the SPS Agreement, the panel's interpretation of relationship between articles 6.1 and 6.3 was upheld and AI measures imposed by India were held inconsistent.

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¹⁸³ Appellate Body Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/AB/R, para. 2.68.

¹⁸⁴ Appellate Body Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/AB/R, para. 2.86. Third parties were Argentina, Australia, Brazil, European Union and Japan.

¹⁸⁵ Appellate Body Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/AB/R, paras 5.186, 5.187.

¹⁸⁶ Appellate Body Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/AB/R, para. 5.221.

¹⁸⁷ Appellate Body Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/AB/R, para, 5,287.

¹⁸⁸ Appellate Body Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/AB/R, para. 5.287.

The appellate body while ruling on the panel's interpretation of articles 2.2 and 5.6 of the SPS Agreement stated that:189

the India's AI measures are inconsistent with Article 5.6 because they are significantly more trade restrictive than required to achieve India's appropriate level of protection, with respect to the products covered by chapter 10.4 of the OIE Code; and finds it unnecessary to address India's request for reversal of the panel's finding that India's AI measures are consequentially inconsistent with Article 2.2

With respect to article 2.3 of the SPS Agreement, the appellate body ruled that India has not been able to establish that the panel has acted inconsistently while conducting an objective assessment of the matter as defined in article 11 of the Dispute Settlement Understanding in its consultation with the individual experts. 190 While ruling that India's Avian Influenza measures are inconsistent with article 2.3, the appellate body upheld the panel findings, in paragraph 7.472 and 8.1.c.vi of the panel report. 191

The appellate body while ruling that India's Avian Influenza measures are inconsistent with the provisions of the SPS Agreement has stated that: 192

the Appellate Body recommends that the Dispute Settlement Body request India to bring its measures, found in this report, and the panel report as modified by this report, to be inconsistent with the SPS Agreement, into conformity with the obligations under that Agreement.

The *India-Agricultural Products* case has made the international trade law scholars to ponder on following points: (a) what kind of sanitary and phytosanitary protection should be taken for those diseases which are non-existent in a particular region; (b) why international standard setting mechanism do not take into account the concerns of a particular country with respect to a specific disease or pathogen; and (c) how can sanitary and phytosanitary measures be applied at a regional level. 193

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¹⁸⁹Appellate Body Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/AB/R, para. 6.1 (d) iv.

¹⁹⁰ Appellate Body Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/AB/R, para. 6.1 (e).

¹⁹¹ Appellate Body Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/AB/R, para. 6.1 (e) ii.

¹⁹² Appellate Body Report on *India – Measures Concerning the Importation of Certain Agricultural Products*, WT/DS430/AB/R, para. 6.2.

¹⁹³ Supra note 161 at 4.

For developed countries the trade disputes involving SPS measures settled by the Dispute Settlement Body mainly has involved the use of sanitary and phytosanitary measures based on precautionary principle but on the other hand the developing countries are more concerned about lack of harmonization, transparency, equivalency and factors restricting them to access markets freely.194

The Indian judiciary has also played an important role in protecting human, animal and plant health. In *M/S Nestle India Limited* v. *The Food Safety and Standards Authority of India (FSSAI)*, 195the Nestle India Limited challenged the order of FSSAI for the withdrawal and recall of nine variants of Maggi instant noodles due to the presence of impermissible level of monosodium glutamate and lead. In this case the y High Court of Bombay pronounced following judgement: (a) the orders were set aside and for protecting the health of consumers, samples were sent to food laboratories; (b) the company was directed to start the manufacturing of Maggi instant noodles and sell it only when the content of lead was within permissible limit; (c) the company was also directed to delete the declaration "No Added MSG" from Maggi packets; and (d) the court also held that the FSSAI had acted in an arbitrary manner. The FSSAI challenged the judgement of Bombay High Court in the Supreme Court questioning the sanctity of the samples submitted to the food laboratories. 196

In *Union Distributors Incorporation* v. *Union of India*,197 the chocolates from Belgium were found to be non compliant with the provisions of the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011. The court in this case stated that the chocolate shell in itself does not contain any vegetable fat. The vegetable fat was present in the filling and it is because of this reason that FSSAI has found these goods to be inconsistent with the given regulations. The court held that the decision of FSSAI was arbitrary as the given regulations clearly states that in case of filled chocolates "the coating shall be of chocolates that meets the requirement of one or more of the chocolate types". It was also held that labelling on the package should be in conformation with the labelling regulations, so that it is ensured that that the consumer is informed about the product which he is purchasing and consuming.198

¹⁹⁴ Aparna Sawhey, supra note 75 at 344.

^{195 2015} SCC OnLine Bom 4713. (2015) 6 AIR Bom R 74. High Court of Bombay, Ordinary Original Civil Jurisdiction Writ Petition (L) No. 1688 of 2015. Judgement pronounced on Aug. 8, 2015 by V. M. Kanade and B. P. Colabawalla JJ.

¹⁹⁶ Food Safety and Standard Authority of India v M/S Nestle India Limited, Special Leave Petition to Appeal (C) No. 33251 of 2015.

¹⁹⁷ AIR 2015 Del 13.

¹⁹⁸ Annual Survey of Indian Law 1048-1049 (The Indian Law Institute, New Delhi, 2014). Also refer following cases: Rice Millers Association v. Union of India 2015 (1) Crimes 559 (Bom), Haripriya Traders v. Union of

In Abdul Khader v. State of Kerala199 it was held that only those who violate the Food Safety and Standards Act will be held liable.

VI Conclusion

The Uruguay Round negotiations and the WTO boosted the globalisation process and resulted in India's integration with the world economy. Since India is not a powerful trading nation, therefore, to say that it has achieved something significant in the trade negotiations is to some extent not true.200 The domestic factors which have hampered exports from India include the following: (i) outdated technology; (ii) lack of infrastructure; (iii) technical skill; and (iv) ineffective policies.

After the SPS Agreement came into force, India has tried its best to mend the institutional gaps in the sanitary and phytosanitary protection regime by enacting new laws for the protection of human, animal and plant health. It has also established various organizations and agencies at national level for regulating SPS measures and for attaining advanced scientific information on sanitary and phytosanitary issues. With respect to changes in infrastructure, it has improved scientific research, testing techniques, storage facilities and certification process at the domestic level for making its industry competitive at the international level.

India has also used the good offices of the WTO dispute settlement system, particularly with respect to disputes involving provisions of the SPS Agreement. The jurisprudence developed by the Dispute Settlement Body in these disputes is surely going to influence the framework of sanitary and phytosanitary regime and the implementation of sanitary and phytosanitary laws in India.201

Sanitary and phytosanitary measures are dynamic in nature. With new advancements in technology and awareness, people are more likely to become conscious for SPS issues and this is set to raise the level of sanitary and phytosanitary standards. Therefore, in such a scenario India should incorporate a comprehensive strategy to cope effectively with such challenges at both domestic and international level.202

India 2014 (4) KHC 576, Trimurti Traders v State of UP 2014 (3) ALJ 187, Sri Balaji Aqua Products v. Union of India 2014 FAJ 520 (Kar).

^{199 2015 (1)} KHC 285; 2015 (1) KLJ 346.

²⁰⁰ Supra note 17 at 852.

²⁰¹ The Dispute Settlement Body request India to bring its measures into conformity with the obligations under the SPS Agreement. Refer Appellate Body Report on India - Measures Concerning the Importation of Certain Agricultural Products, WT/DS430/AB/R, para. 6.2.

²⁰² Supra note 138 at 1016.

In India, laboratories should be made well equipped and the man power involved in the SPS regime should be made technically skilled in order to improve inspection and certification system. At national level a central agency for monitoring sanitary and phytosanitary measures should be established to facilitate implementation of the SPS Agreement and to take necessary actions in order to mitigate its repercussions on international trade.

Monitoring and surveillance of livestock and plant diseases should be improved by establishing well equipped veterinary laboratories and plant testing centers. In addition to this improved vaccines and diagnostic tools should be developed against prevalent or emerging diseases and pests. An integrated plan should be formed and implemented by governments at the centre and states for improving sanitary and phytosanitary protection in the country. Regular seminars and workshops should be conducted by government departments and relevant agencies for increasing awareness in people regarding sanitary and phytosanitary issues.

The Indian firms which deal in exporting agricultural, meat, poultry and marine products should be given assistance and encouragement by government to enter into partnerships at international level so that the technological gap could be reduced and access to international markets is increased. Financial assistance should be given to such exporters through specified banks and governmental schemes so that they can improve their facilities and infrastructure and compete at international level. All laws and regulations relating to protection of human, animal and plant health or life in India should be reviewed and updated regularly on the basis of new scientific and technological advancements and new risk assessment techniques.