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Analysis of South Asian Free Trade Agreement: Focus on Food Safety

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Abstract

The South Asian Free Trade Agreement, at time of inception, encompassed some of the world's least liberalized economies. These economies were well positioned to experience gains from a multilateral agreement. In this paper, we critically analyze the structure, effectiveness and impact of the agreement in terms of not only trade, but also food safety and other issues of interest specific to the participating countries in the context of the agreement. The results of the analysis suggest underperformance in terms of both trade and food safety. To better understand some of the regional specific challenges present in the food safety environment in the region, the paper also examines the status of the Indian carabeef industry.

Keywords: SAFTA, food safety, India, carabeef, water buffalo, free trade agreement, trade analysis

1. Introduction

The 1990's and early 2000's were characterized by rapid growth in the economies of South Asia. Factors influencing this growth included strong demand for minerals and other natural resources found in the region, as well as an increased flow of foreign capital in search of inexpensive labor and manufacturing services [7]. This rapid economic growth was accompanied by a concurrent growth in population and provided a perfect catalyst for increased goods consumption in the region. Historically, many of the countries in the region had assumed a protectionist attitude towards regional trade. Political motivations and trade-restrictive policies, such as import-substitution and prohibitive business rules, prevented the region from progressive integration witnessed in many other parts of the world [14]. However, a spirit of cooperation and the desire to strengthen their "potential for trade and development for the benefit of their people" impelled many of the region's countries to integrate their economies more fully [4]. The mechanism utilized for the integration was the South Asian Free Trade Agreement, or SAFTA. The purpose of SAFTA is summarized by the following objectives:

- 1. A reduction of obstacles preventing the flow of goods across borders in the region,
- 2. The fostering of equitable treatment of member states in terms of trade,

- 3. The introduction of processes amenable to regional culture for the resolution of trade disputes, and
- 4. The creation of an organization by which additional or ancillary trade agreements may be formulated and implemented [4].

This paper will critically analyze the structure, effectiveness and impact of the SAFTA agreement on trade, in addition to food safety and other issues of interest specific to the participating countries in the context of the agreement.

2. Background of the SAFTA Agreement

The South Asian Free Trade Agreement was instituted on January 1st 2006, by the following seven original signatories: Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka [4]. These countries later assented to the inclusion of Afghanistan under the trade agreement in August 2008 [4]. While similar in geographical location, the SAFTA countries are diverse demographically, culturally, and economically. The countries may generally be categorized into two separate groups: the larger, more developed economies, and the smaller, less developed ones, as determined by gross domestic product (GDP) per capita. Bhutan, Maldives, Nepal, and Bangladesh belong in the latter group, whereas India, Afghanistan, Pakistan and Sri Lanka are in the former [28]. GDP per capita was used due to its ability to include the effect of population size on economic activity. Table 1 contains information regarding population levels, GDP, and per capita GDP of the SAFTA nations.



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Country	Population, total (millions)	GDP (current billion USD)	GDP per capita (current USD)
Afghanistan	30	20	656
Bangladesh	155	137	887
Bhutan	0.74	2	2439
India	1237	1843	1490
Maldives	0.34	3	7581
Nepal	27	19	692
Pakistan	179	224	1248
Sri Lanka	21	62	3013

Source: Saxena, Raka, et al. (2015)

Note: SAARC is the body responsible for the creation and implementation of SAFTA. Its organization dates to 1985 when efforts to formally join forces were finally realized. The charter purpose of the organization is to promote and foster the efforts of the member nations (Afghanistan, Bangladesh, Bhutan, India, Nepal, Maldives, Pakistan, and Sri Lanka) with regard to the group's principal areas of concentration: "agriculture, rural development, telecommunications, meteorology, and health and population activities" (saarc-sec.org).

Table 1: Socio-economic Indicators in SAARC Countries.

As is the case with many developing countries, agriculture is a key component of the economy of SAFTA countries. With the exception of Maldives, agriculture in all other SAFTA countries accounts for 14 to 45 percent of total GDP [1]. Among the more common agricultural goods traded regionally are cotton, fruit, rice, cereal grains, sugar, fish, and other value-added products derived from primary crops. The manufacturing and extraction of natural resources such as timber, minerals, and oil/gas are also major contributors to economic activity [26]. From a developmental standpoint, the difference in economic status of the countries involved is drastic. Bhutan, the smallest regional economy has a GDP that is a mere 0.1 percent of the region's largest economy, India [28]. Preferential treatment is afforded by the SAFTA to all member nations through various provisions, centered on a tariff-reduction schedule, in accordance with the developmental stage of each member state. The schedule for the smaller economies is less stringent, requiring the same ultimate reductions but over a greater time horizon. This was supported by the justification that the so called "Least Developed Countries" rely more heavily on intra-regional tariffs for government revenue. Generally, the agreement outlines plans to reduce all tariffs to 20 and 30 percent within two years of implementation. Subsequent tariff decreases of 0-5 percent would have taken place within 5-8 years, depending on how a country was classified. Countries classified as "Least Developed" receive more time to phase-in the tariff reductions (8 years), wheras the other nations are required to reduce tariffs over a shorter time period [4].

Additional measures are not explicitly demarcated by the agreement, but are nonetheless facilitated by its existence. These comprise of cooperative infrastructure development, customs and banking harmonization, the relaxation of foreign exchange regulation, and improvement in food safety coordination [4]. One particularly salient example of food safety coordination is the establishment of the regular forum for SAARC Chief Veterinary Officers' (CVOs). The forum provides the

opportunity for vital collaboration on issues crucial to the integrity of the animal product value chain, such as "the control of trans-boundary animal diseases, capacity building on epidemiology activities, and networking among the veterinarians, regional laboratories and other veterinary institutions" [26].

3. Facilitation of Trade

Following the implementation of SAFTA in 2006, the region experienced marginal growth in trade - far less than the original expectations. Intra-regional trade in the region accounts for approximately 5 percent of total trade. This is dramatically lower than the neighboring ASEAN countries whose intra-regional trade accounts for nearly 32 percent of the trade balance [24, 20]. The underperformance of the trade agreement is primarily viewed as a result of its lengthy and often problem-ridden introduction [10]. The countries involved face significant political obstacles from past and present conflicts. The conflict between India and Pakistan is a primary example. In 2017, India boycotted a South Asian Association for Regional Cooperation (SAARC) regional summit in protest of terrorist attacks carried out by Pakistani groups [29]. With this action, many are fearful that SAARC and its charter agreement, SAFTA, may not reach full fruition or worse yet, disintegrate. Full implementation was originally scheduled for completion in 2017, but now that deadline is in jeopardy, further delaying many of the potential benefits of the agreement. Nevertheless, some progress in growth of intra-regional trade has been achieved.

Data derived from SAARC's database shows a pre-SAFTA annual growth rate in intra-regional exports of approximately 20 percent (Figure 1). This growth accelerated following the introduction of SAFTA in 2006, to a 23 percent average, although the pattern of trade became more volatile after 2008, when the volume of exports fluctuated frequently rather than continuing on the steady trend of growth. Much of this growth may be

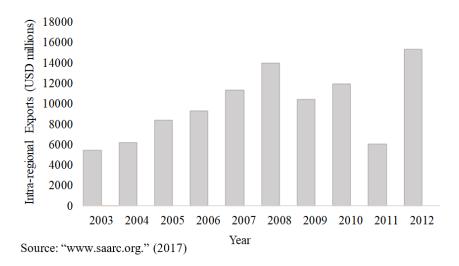


Figure 1: Growth in Intra-regional Exports SAFTA.

attributed to growth in specific sectors, particularly extractive industries such as diamond mining, petroleum and gas. To a lesser degree, total trade growth was encouraged by the agricultural sector, with rice and cotton as the two most important agricultural commodities [26]. This follows general neo-classical economic theory (Heckscher, Ohlin, Samuelson), especially as pertaining to differences in factor abundance driving the pattern of trade [19]. According to the Heckscher, Ohlin, Samuelson model, it is anticipated that the majority of economic growth would be the result of trade in industries that enjoy factor abundance of the inputs needed for production (i.e. energy and minerals). Furthermore, the SAFTA bloc is also endowed with large quantities of low-cost labor, perfect for growing labor-intensive crops such as cotton and rice. These two endowments logically point to the industries (extractive and agricultural) which have driven trade growth thus far, and that continue to enjoy remarkable potential for additional expansion.

While growth occured following the implementation of SAFTA, it largely failed to filfull its full potential, both within and outside of the agricultural sector. Per SAFTA, each country is permitted to create and maintain a "Sensitive Product List", or a list of goods for which the country does not concede tariffs. Although common among most free trade agreements, the countries in the SAARC region hold some of the most extensive Sensitive Product Lists in the world [17]. Chief among the products included in many of the countries lists, especially India, are food products [4]. As previously outlined, a large portion of the populace throughout the region is dependent on agriculture for their livelihoods. Therefore, the national governments are forced to strike a careful balance between trade liberalization and alienating a great deal of their constituency. For this reason, the economic results of SAFTA contrast sharply with those experienced by other regional trade agreements, specifically those of the Association of Southeast Asian Nations (ASEAN), which has experienced a far greater increase in total intra-regional trade post-agreement [34].

Overall, SAFTA has struggled to achieve its original pur-

pose to substantively increase intra-regional trade. However, there has been other progress made regarding secondary provisions of the agreement. Foremost among these achievements are the investment in infrastructure throughout the region, the relaxation of some protectionist economic measures, and the steady, albeit slow, progress towards food safety standards in line with international regulations.

4. Food Safety and the Trade Agreement

In the years prior to the introduction of SAFTA, the South Asian area struggled to formulate a coherent food safety system. Some of the region's countries, such as India, focused heavily on those products that have special relevance to common religious beliefs (e.g. fresh vegetables and legumes), whereas others placed greater emphasis on products considered key to the domestic economy (e.g. Bangladesh and fish). The result was a regional system with disparate safety systems for similar food groups, where countries addressed identical food safety threats without uniformity or regularity. A lack of consistency across borders and the absence of regional and international economic integration complicated commercial activity. One specific example of this disparity between countries is the regulation regarding the use of DDT, a toxic and potent pesticide. DDT is particularly dangerous due to its persistent nature and propensity to travel throughout the food value chain [6]. India recently resisted a global ban on the use of the dangerous pesticide, undoubtedly because of its position as the worlds largest producer and consumer of the chemical [30]. This stands in contrast to the 72 countries who have restricted or altogether banned the use of this pesticide [2]. In the absence of effective testing mechanisms and coordinated policy, food traded by countries in the SAFTA region may be contaminated with DDT.

Another aspect that originally limited the development of a comprehensive food safety system was the structure of the agricultural sector in the region. Agriculture in developing nations is typically a small-holder economic activity, which exhibits a large number of producers dispersed across a large geographical area. Because of its highly distributed structure, the food industry was difficult to educate regarding food safety laws and/or regulations. In addition, enforcing said regulations was also difficult. Food safety finally began to be considered thanks to the focused efforts of the United Nations Food and Agricultural Organization (FAO).

Beginning in 1998, even before the creation of SAFTA, FAO and the member nations of the SAARC initiated the first of many activities intended to help foster the establishment of a harmonized, internationally equivalent food safety system across the region [27]. A series of regional workshops were conducted, organized much like a miniature session of the Codex Alimentarius Commission. Prior to and in-between meetings, specific countries were given committee assignments to research and report on a variety of food groups that posed the greatest threat to food safety in the region. The groups included fish and fish products, cereals, pulses, legumes, processed fruits and vegetables, milk products, fats, oils, meat products, herbs and spices [27]. Generally, the consensus among the member nations was to recognize and adopt Codex Alimentarius standards as the basis for food safety, with a few exceptions. Herbs and culinary spices was one area where Codex had not yet promulgated standards. At the suggestion of Sri Lanka, a motion was approved to bring this matter to the attention of the Codex Commission [27]. As a result of workshop proceedings, a Codex committee was organized in 2013 with India as host country, in order to address the lack of regulation tailored to herbs and spices [9]. At this stage, many of the countries in the region were already Codex members, and those who were not (Afghanistan, Bhutan, Maldives) were strongly encouraged to follow suit. It was also determined that the process of aligning national standards with those of Codex would occur on an as-needed basis [27]. In other words, as industries developed the need for an internationally equivalent standard, typically through the growth of foreign trade, the country would review, adjust and adopt the pertinent Codex standards for that particular food or food group. This type of alignment would be left to the discretion of each member country rather than adopted on a regional basis, a decision that has proved detrimental to the success of SAFTA in regulating food safety. Members of SAFTA held a meeting as late as 2014, nearly 15 years following the initial FAO workshops, in an attempt to eliminate the remaining divergences among food safety systems [13].

Perhaps it was the preliminary work completed by the SAARC community that prevented the bloc from including substantive food safety provisions in the actual free trade agreement years later. The only articles that generically apply to the recommendations made by Codex in the SAFTA are:

- 1. Article 14, which highlights a clause that may be used to block the importation of a product that may threaten human, plant or animal life or health [4];
- 2. Annex II, which assures technical assistance to Least Developed Countries (LDC) in the trading area. This covers help for those countries without the current capacity

or resources to develop testing, certification, and laboratory analysis capability, as well as help in the area of the World Trade Organization's Sanitary and Phytosanitary Measures Agreement (SPS) and Technical Barriers to Trade Agreement (TBT). Details regarding the form and quantity of aid are extremely vague [4]; and

3. Annex III, pertaining to SAFTA rules of origin. This section is related more to the process required to gain preferential tariff treatment than to ensuring the wholesomeness of the food and its source [4].

Beyond these limited mentions, the free trade agreement as a whole fails to address other important food safety considerations in any detail. As a result, a great deal of ambiguity surrounds the accepted processes and procedures regarding the trade of food and food products among member nations.

The agreement also neglects to address other food safety issues that are specific to the region. One such issue that is prevalent among member nations is the lack of suitable testing and laboratory facilities. This was originally identified as a major obstacle during the SAARC food safety workshops of 1998 [27]. However, six years later when SAFTA was signed, there was no mention of how this challenge would be addressed by the group. While there has been some progress in developing capacity for food safety testing and analysis, especially through partnership with private industry, greater advances may have been made through a concerted commitment and effort via the free trade agreement.

5. Indian Carabeef Industry

India, by nearly every metric, is the most dominant economy in the region to this day. As such, it often assumes a leadership role in developing more effective food safety policy. In 2017, Indian officials launched an online training portal (Fos-Tac) which educates owners and employees in food-oriented businesses on best hygienic practices and other food safety regulation [33]. The portal is accompanied by rules that require every Indian food business to have at least one employee certified via the portal. This innovative response to a growing demand for greater food safety is a prime example of progress in the region [12]. India, through example, is setting a standard for the dissemination of food safety education, which will likely be reflected in the years to come by neighboring SAFTA members and their respective food safety systems. However, despite the country's frequent role as an innovator in the food safety area, India's food industry continues to exhibit systemic weakness in various sectors. The following is a brief discussion of a current food safety issue in India that has substantial health, cultural, and political implications.

Apart from being the largest of the regional economies, India is also distinctive in that nearly 80 percent of the country's 1.2 billion population identify as traditional Hindus [21]. This fact has a profound effect on patterns of consumption and production within the country and region. Traditional Hindus generally hold the religious belief that cows are a sacred animal.

Country	2013 (tons)	2014 (tons)	2015 (tons)
Vietnam	524370.90	633800.24	605247.34
Malaysia	121741.00	130876.81	135936.81
Egypt	107825.72	128082.00	115317.00
Saudi Arabia	74598.96	73821.31	64649.54
Iraq	29992.00	23602.54	42986.88
Phlippines	45327.86	42891.95	44359.22
Algeria	48840.00	42672.99	40664.91
United Arab Emirates	42793.54	40876.26	35496.37
Thailand	174076.92	115765.23	35439.26
Kuwait	20645.99	32.862.83	29937.32

Source: Express News Service (2017)

Table 2: Top Export Destinations for Indian Carabeef

The revered status of cows as a holy symbol has been the basis for a growing conflict in the country and has created heated debate as Indian politicians become involved in the issue. The increasing involvement by politicians in the debate is seen as a response to the ever-growing exports of Indian buffalo meat. For traditional Hindus, no religious significance accompanies buffalo meat, otherwise known as carabeef. While India is currently the world's largest exporter of carabeef, many suspect that the country's dominance in this industry is being driven by not only increased production of buffalo, but also the burgeoning (and illegal) practice of slaughtering cows [15]. From a food safety perspective, the prospect of cow meat entering the buffalo meat supply chain is particularly troublesome. Any slaughter of cows is strictly prohibited in India; therefore, if cow meat is in fact being marketed under the guise of buffalo meat, it is likely being processed, packaged and transported by abattoirs and firms that are neither registered with the Food Safety and Standards Authority of India (FSSAI) nor compliant with international food safety standards.

Regulatory oversight in the Indian carabeef packing industry requires certification of all slaughtering facilities that export product in accordance with Codex standards promulgated by the Codex Committee on Meat Hygiene [11]. The regulatory infrastructure is adequate for participation in international markets, even those with higher standards, as demonstrated by India's strong carabeef trading partnership with Muslim majority countries such as Saudi Arabia and Egypt [18], as demonstrated in Table 2.

Beyond normal food safety standards, many of the importing countries have additional religious requirements for meat products. The satisfaction of such requirements, together with conventional hygienic food safety standards, points towards an effective regulatory body for carabeef in India. However, proficiency in hygienic oversight does not necessarily point to adeptness in other areas recommended by the Codex Committee guidelines on Food Import and Export Inspection and Certification Systems.

Origination of product is an important issue in the context of the potential risk for adulteration of carabeef by non-regulated, illegal beef. India's carabeef industry, like the rest of the domestic agricultural sector, is highly dispersed. Very few large firms specialized in the production of buffalo, but instead aggregate buffalo from the large number of small producers within the country. This poses a daunting traceability challenge, because in the absence of a formal tracing mechanism and in light of the massive number of small producers, it proves difficult to associate a particular carabeef product with a producer or even location within the country. This situation, in turn, makes any attempts to identify and eliminate threats from the production phase of the supply chain more difficult. Furthermore, Indian law requires that exported carabeef be in deboned form. As a result, carabeef export products are not primal cuts, but secondary products such as mince and cubed chunks [18]. Because of the deboned requirement and the lack of traceability, the carabeef industry exhibits a high degree of vulnerability from a food safety standpoint. Illegal beef harvested in unregulated facilities could potentially enter the carabeef supply chain. If such cases were exposed, India could very well risk its status as an export power in the bovine meat sector, as export partners could shift their purchases towards producing nations having regulatory oversight over bovine meat products.

6. Conclusions

The South Asian Free Trade Agreement marked the beginning of a movement in the right direction for the region. However, after more than a decade, many of the anticipated results have yet to be seen. Besides an unwillingness to relinquish protectionist trading terms, one contributing factor to the lack of efficacy demonstrated by the agreement is an absence of clearly defined, consensual food safety regulation. The majority of nations that are party to the agreement have economies firmly rooted in agriculture, heightening the need for a coherent food safety policy. Finally, the region is uniquely characterized by market conditions driven by cultural and political factors. As in the case of Indian carabeef, regulators need to carefully balance societal demands with health and safety concerns to create an environment conducive to economic growth.

7. Declaration of Conflicting Interest

The author declares no conflict of interest.

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10. References

- [1] Agriculture in SAARC region. (2001, December 31). *Dawn*. Retrieved October 9, 2017 from https://www.dawn.com/news/12604
- [2] Ali, A. N. (2013). Food Safety and Public Health Issues in Bangladesh: A Regulatory Concern. *European Food and Feed Law Review* 8(1), 31-40.
- [3] Anaka, A., Wickstrom, M., & Siciliano, S. D. (2008). Biogeochemical toxicity and phytotoxicity of nitrogenous compouds in a variety of arctic soils. *Environmental Toxicology and Chemistry*, 27(8), 1809-1816.
- [4] Asia Regional Integration Center. (n.d.). "South Asian Free Trade Area (SAFTA)". Retrieved from http://saarcsec.org/digital_library/detail_menu/agreement-on-south-asian-freetrade-area-safta
- [5] Association of Official Analytical Chemists (AOAC). (1995). Official Methods of Analysis, 16th Ed. Washington, DC: Association of Official Analytical Chemists, Inc.
- [6] Bate, R. (2007, November 5). *The Rise, Fall, Rise, and Imminent Fall of DDT*. American Enterprise Institute.
- [7] Bhattarai, K. (2016). Economic Growth and Development in India and SAARC Countries. Business School, University of Hull, UK.
- [8] Brammell, W. S. (1974). Collaborative study of a potentiometric titration method for determining sodium chloride in foods. *Journal of Association* of Official Analytical Chemists, 57, 1209-1216.
- [9] Codex Committee on Spices and Culinary Herbs (2017, February). Third session of Codex Committee on Spices and Culinary herbs (CCSCH₃). Retreived from http://ccsch.in/
- [10] Das, D. K. (2008). The South Asian Free Trade Agreement: Evolution and Challenges. *MIT International Review*, 23-29.
- [11] Food Safety and Standards Authority of India. (n.d.). Retrieved October 9, 2017 from http://www.fssai.gov.in/home
- [12] Food Safety and Standards Authority of India. (n.d.). "About FosTac". Retrieved from https://fostac.fssai.gov.in/fostac/index#about.
- [13] Food and Agriculture Organization of the United Nations. (2014). "Implementation of Good Agriculture Practices in SAARC Countries". Regional Consultation Workshop, September 22-24, 2014.
- [14] Giri, P., Karinje, P., & Verma, R. et al. (2015). A Study and Analysis of Challenges, Achievements and Hurdles Faced by SAARC Nations in Trade Integration and Growth. *International Journal of Engineering Technology, Management and Applied Sciences*, 3(1), 204-215.
- [15] Gopal, S. D. (2015, February 12). Selling the Sacred Cow: India's Contentious Beef Industry. *The Atlantic*. Retrieved from www.theatlantic.com/business/archive/2015/02/selling-the-sacredcow-indias-contentious-beef-industry/385359/
- [16] Kumar, R., & Singh, M. (2009). India's Role in South Asia Trade and Investment Integration. ADB Working Paper Series on Regional Economic Integration. Retrieved from https://www.adb.org/sites/default/files/publication/28506/wp32-indiarole-south-asia-trade.pdf
- [17] Kumar, S., & Ahmed, S. (2014). Impact of Sensitive Lists under SAFTA: Quantitative Assessment Using a Partial Equilibrium Modeling. *European Journal of Globalization and Development Research*, 10(1), 595-617.

- [18] Landes, M., Melton, A., & Edwards, S. (2016). From Where the Buffalo Roam: India's Beef Exports. *Livestock, Dairy, and Poultry Outlook No.* (*LDPM-264-01*), 36.
- [19] Milberg, W. (1996). The rhetoric of policy relevance in international economics. *Journal of Economic Methodology*, 3(2), 237-259.
- [20] Neyamul, S. (2018, February 14). SAFTA: Promises and Performance. *The Financial Express*. Retrieved from http://thefinancialexpress.com.bd/views/views/safta-promises-andperformance-1518623203
- [21] Office of the Registrar General & Census Commissioner, India. (n.d.). 2011 India Census Data. Retrieved from www.censusindia.gov.in/2011-Common/CensusData2011.html
- [22] Pradesh, U. (2017, June 24). India's huge buffalo-Meat industry is in limbo. *The Economist*. Retrieved from www.economist.com/news/business/21723859-countrysslaughterhouses-are-envy-rich-world-indias-huge-buffalo-meat-industry
- [23] Qingqing, C., & Daye, C. (2017, January 19). Chinese beef importers wary of Indian buffalo meat. *Global Times*. Retrieved from www.globaltimes.cn/content/1029723.shtml
- [24] Raghuramapatruni, R. (2011). The experience of SAARC as a regional block and its future potentialities. *Indian Journal of Economics and Business*, 10, 57-72.
- [25] Raj, S., & Barry, L. (2017, June 5). Modi's Push for a Hindu Revival Imperils Indias Meat Industry. *The New York Times*. Retrieved from www.nytimes.com/2017/06/05/world/asia/india-uttar-pradesh-meatslaughterhouses-cows-buffalo.html
- [26] SAARC Group on Statistics (n.d.). Exports by month [Database]. Retrieved from http://www.saarcstat.org/db/trade_stat/saarc_exports_by_month
- [27] SAARC Workshop on Food Safety in SAARC Countries, Harmonisation of Food Regulations. 2003, pp. 118, SAARC Workshop on Food Safety in SAARC Countries, Harmonisation of Food Regulations.
- [28] Saxena, R., Paul, R. K., Rana, S., Chaurasia, S. Pal, K., Zeeshan & Joshi, D. (2015). Agricultural Trade Structure and Linkages in SAARC: An Empirical Investigation. *Agricultural Economics Research Review*, 28(2), 311-328.
- [29] Sharma, S. (2016, September 30). SAARC summit: Sri Lanka joins India, 3 others in boycott; Pakistan isolated. *India Today*. Retrieved October 9, 2017, from http://indiatoday.intoday.in/story/saarc-summit-sri-lankajoins-india-boycott-pakistan-isolated/1/777002.html
- [30] Singh, R. (2015, September 17). India Is Phasing out the Use of DDT, but It's Not Tackling Its Long-Term Effects. DNA India. Retrieved from www.dnaindia.com/analysis/standpoint-india-is-phasingout-the-use-of-ddt-but-it-s-not-tackling-its-long-term-effects-2125945
- [31] Export Genius Blog. (2017, May 6). "Top Beef Exporters in India: Report on Beef and Other Meat Exporters". Retrieved from www.exportgenius.in/blog/top-beef-exporters-in-india-report-on-beefand-other-meat-exporters-22.php
- [32] Where Indian buffalo meat exports go. (2017, April 2). The Indian Express News Service. Retrieved from https://indianexpress.com/article/explained/where-indian-buffalo-meatexports-go-4609512/
- [33] Whitworth, J. J. (2017, May 28). "FSSAI and GFSP Urge Food Safety Investment in Asia." Foodqualitynews.com. Retrieved from www.foodqualitynews.com/Article/2017/05/29/Increased-Asianinvestment-in-food-safety
- [34] Wong, C., King, K., Ismail, N. W. & Law, S. H. (2017). The Impact of Asean Economic Community (AEC) on Intra-Asean Trade. International Conference on Business and Economic Research (ICBER 2010).