

Focus 68 - Sustainable development through trade - Case study: Pakistan's GSP+ and the red meat market

By Josephine Chartier

20 January 2021 - DOI: [10.48251/SADF.ISSN.2406-5633.F68](https://doi.org/10.48251/SADF.ISSN.2406-5633.F68)



Joséphine Chartier is SADF's Junior Research Fellow. She is currently an undergraduate student in Liberal Arts at the University of Warwick, England. She intends to major in quantitative economics. Lately, she has been focusing her researches on the Belt and Road Initiative, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the Regional Comprehensive Partnership (RCEP) in Asia - with an emphasis on the outcomes of these economic programs for South Asia's populations, environments and economies.

Abstract

The European Union's Generalised Scheme of Preferences+ (GSP+) trade scheme intends to promote sustainable development through trade for those countries that deserve some trade promotion for their special achievements regarding fundamental political goals. Whereas the political achievements specifically contemplated by the preferential trade scheme are normally the ones under direct scrutiny, it is also important to evaluate a country's dynamics according to other criteria: the global environmental impact is a case in point. This paper aims to analyse the EU's indirect incentive to Pakistan's exports of red meat – specifically, beef. Pakistan, already a major casings provider to the EU, started exporting red meat amidst the GSP+'s implementation – and has been seeking to further integrate the European's red meat market. Whereas it might make sense to maintain those existing derogations under the EU's Common Agricultural Policy (CAP) that provide incentives to red meat production which follows a range of high environmental and rural development standards, there are several reasons to disincentivise these productions. Red meat production carries considerable damaging environmental effects – including the depletion of water resources and reduction of water quality. Here Pakistan constitutes a case in point because of its water-stress situation – that alone justifies restrictions, not incentives, to red meat production in the country. International institutions such as the FAO warn us yet and again about the unsustainability of both the production and consumption of red meat due to its impacts on water resources. The EU so aligns its public discourse. However, after reviewing numerous academic papers, reports, and official documentation,

we find that actual policy fails to match the rhetoric. Lifting custom duties for various animal products under the GSP+ without proper environmental impact assessments constitutes a telling example. Furthermore, the funding of ‘pro-meat’ campaigns increases incentives to the livestock sector and does not favour a shift away from red meat consumption. Incoherencies in EU policies may work against the shift from animal-based diets towards more sustainable (plant-based) diets. This paper explores some possible solutions for correcting these inconsistencies and improve a water-sustainable combination between supply and demand of red meat.

Keywords

European Union, Pakistan, Livestock, Beef, Sustainability, GSP+ water, environment

Abbreviations

EU – European Union

GSP+ - Generalised Scheme of Preferences

GHG – Greenhouse Gases

CAP - Common Agricultural Policy

EBA – Everything But Arms

SDG-Sustainable Development Goal

WFD- Water Framework Directive

EEA-European Environment Agency

IBIS-Indus Basin Irrigation System

FAO-Food and Agriculture Organization

OECD-Organization for Economic Co-operation and Development

Table of contents

- I. Red meat: a water-unsustainable production
 - i. General overview
 - ii. A top-priority concern for Pakistan
- II. The red meat production chain in Pakistan
- III. The opening of EU's red meat market to Pakistan
- IV. A need for coherence in EU policies
 - a. The current state of affairs
 - b. Potential solutions to the problem

Introduction

Water sustainability has been a priority project in the European Union’s environmental policy, as evidenced by the adoption and application of the Water Framework Directive (WFD) since 2000 (European Commission, 2020). Rephrasing the famous expression used by the Brundtland Commission, the very term ‘*water sustainability*’ implies that present uses of water resources do not compromise the ability of future generations to answer their own needs (World Commission on Environment and Development, 1987). Such policy aligns with a consensual international engagement to build a more water-sustainable future, embodied in the United Nations’ Sustainable Development Goals (6th: “*clean water and sanitation*” and 14th: “*life below water*”; United Nations, n.d.). However, trade actions taken by the EU do not echo the clarity of its discourse regarding water management – and latent inconsistencies emerge. The elimination of custom duties for the export of red meat, and more particularly beef, to the EU under the GSP+ is a case in point – one from which Pakistan’s livestock sector has been benefitting since 2014. This clause of the accord has de facto provided a positive incentive to increase its export of red meat to the EU – and to a greater extent its production. The interconnection between the livestock sector and the depletion in both the quantity and quality of water resources (Steinfeld et al., 2006) remains unchallenged. This incoherence identified in the EU’s public discourse versus trading actions at the very least prevents the concretisation of a more water-sustainable future. Pakistan in turn combines even higher levels of water scarcity with ever greater development of the livestock sector. This report firstly addresses (I) why red meat is a water-unsustainable product, (II) the characteristics of the red meat production chain in Pakistan and (III) the opening of the European market. Second, this paper further stresses the absolute necessity for coherence in EU policies when it comes to water-sustainability issues and potential solutions.

I. Red meat: a water-unsustainable product

The next paragraph attempts to (a) re-establish the consequences of red meat production and consumption as regards the deterioration of water resources. The recognition of such processes is (b) all the more pressing in the case of Pakistan, who already suffers from high water-scarcity levels.

a. General overview

The red meat sector is partly responsible for the impoverishment of water resources, as well

as for degradation in quality. Overall, red meat is the costliest food type in terms of both production and consumption – the worst as concerns general sustainability. According to the European Environment Agency (2019, para. 1), meat and dairy products contribute to 6% of the EU’s economic value, that is, four times less than their environmental impact (24%). Beef is the costliest of all. For instance, Weidema et al (2008, p. 6) concluded that it holds an ecological footprint five times larger than that pork and that the total “*monetarised environmental impact of beef*” amounts to 112% of its private costs. Such statistics leave no place for doubt regarding the general environmental implications of red meat production and consumption. Water resources are particularly affected. The causes for this mismanagement of global aquatic resources can be divided into two categories: those that impact the quantity of water available, and those that influence its quality. Within the livestock sector, those most responsible for the impoverishment of hydric reserves include: the water needs of the livestock itself, the use of service water, and the employment of water for meat processing as well as for feed crops irrigation (Steinfeld et al., 2006). According to the analysis of Mekonnen and Hoekstra (2012, p. 409), the average water footprint of beef equates 15, 415 m³ per tonne of product (versus 1644 m³/ton for cereals). Furthermore, depletion of hydric supplies as concerns quality is due to : the evapotranspiration of water by feed crops, nutrient contamination, biological contamination, the erosion of agricultural lands and the application of heavy metals (Steinfeld et al., 2006). Indeed, livestock wastes (manure) are commonly used as a fertilizer, which leads to the pollution of groundwater and nearby water streams with excess nutrients (mainly Phosphate and Nitrate). As a result of water mismanagement, issues such as water acidification, aquatic toxicity and eutrophication emerge. Weidema et al. (2008, p. 31) deemed the relative contribution of beef and pork to water mismanagement in the EU as follows: 29% and 25% in the acidification process, 16% and 44% in the aquatic toxicity issue, and 24% and 28% in the aquatic eutrophication process. All these facts point out the extensive damage that exaggerated production and consumption of red meat impose on global hydric resources.

b. Water-sustainability: a priority concern for Pakistan

In Pakistan, the livestock sector is expanding. Despite its consistent and considerable participation in the country’s economic growth, the sector entails major environmental downsides, namely as concerns water management and security, Pakistan, which is most dependent on the Indus Basin Irrigation System (IBIS), suffers from restricted access to freshwater. The average amount of water available per capita is inferior to the traditionally established scarcity level of 1,000 m³/person to begin with (Qureshi & Ashraf, 2019, p. 2). A paper issued by the United Nations Development Programme (2016, p. 1), reveals that

the number of people in Pakistan with no access to safe water reaches 27.2 million. Furthermore, other than suffering from a water-quantity issue, the country experiences further problems related to the quality of its hydric resources. A significant part of the population has no access to clean water. This, in turn, affects public health, causing water-related diseases to develop and spread. For instance, each year, almost 16, 800 children under the age of 5 die of diarrheal because of the low quality of water and toilet facilities (WaterAid Global, n.d.). Anthropogenic pollution and the salinization process of freshwater are among the main rationales responsible for the low water-quality level of the country. Aslam and Prathapar (2006, p. 5) estimated total losses endured due to the salinization process to amount to 28,000-40,000 hectares or US\$230 million of revenue per year. In the light of this situation, sustaining an intensive livestock production can be said to constitute a precarious undertaking to say the least. With a livestock population of 55 million heads (Department of Anatomy, University of Agriculture Faisalabad, 2018, para. 2), water withdrawal for irrigation and livestock in Pakistan already equals 172,371 million m³/year – over 90% of the total water withdrawal of the country (Food and Agriculture Organization of the United Nations, 2011, p. 7). Water-related issues in the country cannot be neglected, especially in the livestock sector. Efficiency in water consumption and water security should of course be achieved before even considering to further expand the industry.

II. The red meat production chain in Pakistan

The second part of this paper attempts to gather necessary information related to the main characteristics of the livestock sector in Pakistan, with an emphasis on red meat. Economically speaking, the livestock sector is the largest agricultural subdivision, contributing with 60.6% of the aggregate agriculture sector and 11.7% to the nation's GDP (Finance Division Government of Pakistan, 2020, p. 18). Because it constitutes a strong agent for economic growth, it employs a significant part of the country's population, especially communities living in riparian areas (in the order of 35 million people; Department of Anatomy, University of Agriculture Faisalabad, 2018, para. 2). Furthermore, the types of meat products supplied largely vary: from fresh to vacuum-packed meat to processed meat (nuggets, sausages, kabab; Sohaib & Jamil, 2017, 335). Though consistently contributing to the nation's economy, the Pakistani livestock industry only amounts to a minor share (2.9%) of the meat global market (Sohaib & Jamil, 2017, p. 335). Yet the Pakistani meat industry ambitions to further expand and reverse this trend. A comparison between the growth of the global and Pakistani meat markets provides a clear insight into this aspiration and the processes involved. Whereas the global production of red meat grows slowly (only +0.3% in 2015), Pakistan has been experiencing a strong

linear (not to say exponential) type of progression. Dynamics in the production of beef in Pakistan (+39% between 2008 and 2019) largely outpace those of other beef-producing areas. Worldwide, red meat production increased by +9% (and in Europe, it dropped by 3%; Ritchie & Roser, 2019). Unquestionably, Pakistan is set to maintain current paths and further increase its red meat production in the future – especially if it benefits from incentives to do so. In the next decade (2020-2029), the country is believed to become a competitor to leading countries such as China and Brazil (Organisation for Economic Cooperation and Development [OECD] & FAO, 2020). Overall, despite Pakistan's still relatively small share in the world's red meat market, the sector has grown enormously in the last few decades – and doesn't seem set for any downturn. In fact, the country's history of red meat production seems yet to be written.

III. The opening of the EUs' red meat market to Pakistan

It is no surprise that Pakistan has been seeking to expand exports of red meat to the EU, given the high marginal short-term gains the country would achieve with such strategy. Generally speaking, the general process of exporting means for the producing agent both economic benefits (increased foreign exchange reserves, wages...) and costs (transportations, taxes, ...). However, the GSP+ granted to Pakistan in 2014 sets custom duties to enter the European market as zero. This benevolent policy is applied to a large number of commodities originating from Pakistan, including red meat products (Regulation No 978/2012 of the European Parliament, 2012). Such reform much increases the relative attractiveness of the European red meat market for the Pakistani industry – and provides a major competitive advantage. More than a financial asset per se, the European market's overall appeal is related to the consumption patterns of its citizens, which is characterized by a high meat average intake. In fact, the World Cancer Research Fund (2018, para. Dietary Goals) recommends a maximum intake of 50-70 grams per person per day of meat, a number far surpassed by EU consumers. For instance, in 2013, daily meat consumption per capita per day equalled 222 grams (Ritchie & Roser, 2019). The elimination of custom duties, coupled with high demand, dictates the high attractiveness of the EU market. Furthermore, Pakistan already exports specific animal products to the EU such as casings (the second largest animal-based commodity exported by the country). In 2011, its total export value amounted to 51.6 million USD, among which 87% originated from the EU (*Enhancing Livestock Sector Export Competitiveness*, n.d., p. 35). As concerns the export of beef products, some were first exported to Germany (2013) reaching an export value of 601 thousand USD; followed by Spain (2015) at a value of 230 thousand USD (Sardar et al., 2019, p. 693). Other countries such as Sweden, Denmark, Austria, Finland, Belgium, the

Netherlands and Poland are also targeted as “*future potential markets*” by the Pakistani beef industry (Sardar et al., 2019, p. 693). This increasing interest manifested by the country’s red meat sector in exporting to the EU is supported by the Pakistani government. Said government has even made a commitment to develop exports and meat processing facilities in the country – for example the Lahore meat processing plant (Sohaib & Jamil, 2017, p. 333).

IV. A need for coherence in EU policies

After having focused on Pakistan and the water mismanagement/red meat production issue, the last part of this paper discusses the (likely involuntary yet) ambiguous acquaintance of the European Union with the problem, as well as some proposed solutions to remedy it. This will be undertaken by (a) clearly evaluating the EU’s current position on the matter and (b) providing some potential resolutions to improve the tackling of water unsustainability in the production of red meat.

a. The current state of affairs

There is one main issue in the EU’s policy that concerns us here: the contradictions between its discourse/recommendations and its actions. Indeed, the organisation strongly advises its citizens to have a balanced consumption of red meat (European Commission, 2020) and favours the idea of a water-sustainable future. However, in the world of facts, actual engagements fail to materialise. Regarding its positive political commitment, the concept of ‘*sustainability*’ lies at the core of every contemporaneous enterprise undertaken by the EU. This can be exemplified by the European Green Deal (idea of a climate neutral EU by 2050) and the Common Agriculture Policy objectives (European Commission, 2019). The GSP+ trade scheme itself constitutes another very eloquent example of the EU’s engagement to a more sustainable future – one that includes a better management of hydric resources (Regulation (EU) No 978/2012 of the European Parliament, 2012). In the legal documentation describing the basics of the GSP agreement we find a clearly stated, high valuation of respect for the environment (quoting for example the Kyoto Protocol, the Basel Convention, the Stockholm Convention on Persistent Organic Pollutants...). The aim is set to achieve Sustainable Development Goals matured by the United Nations in beneficiary countries (Regulation (EU) No 978/2012 of the European Parliament, 2012). However, the implementation of these objectives remains paradoxical at best. The EU has been subsidizing a large range of programs with a common characteristic: they directly support the red meat industry. For example, during the last three years, the European Union subsidized more than 15 bovine meat marketing campaigns. This represents a budget of over 26 million euros which could have been otherwise spent – for example subsidizing

awareness campaigns regarding the interconnections between nutrition and the environment (Consumers, Health, Agriculture and Food Executive Agency, 2021). In a document published by the European Commission regarding the campaign ‘What a Wonderful Beef’, one can read in black and white that the goal is to “*increase product awareness, establish a high degree of product relevance, increase product preference*” (Consumers, Health, Agriculture and Food Executive Agency, 2021). Such actions make it even harder to introduce a change in EU citizens’ meat consumption habits. Additionally, the elimination of all custom duties for meat products under the GSP+ can only produce another counter incentive, in a business-as-usual scenario: increase the consumption and production of red meat.

b. Potential solutions to the problem

Coherence between public discourse and practical action is crucial for solving the water mismanagement/red meat issue. Other than undermining the EU’s credibility, incoherence sends paradoxical incentives to both consumers and suppliers – contradictions which, in the end, destabilize the market (Morales, 2018). The first steps to achieve the objective of a coherent policy framework would be to cut monetary support to ‘pro- red meat’ marketing campaigns and implement some clear marketing legislation for foods. Only a handful of European countries have effective regulations for foods marketing at the moment. It is hard for legislators to determine what food types should or should not be allowed on the market, a problem which ‘*nutrient profile models*’ may solve (WHO Regional Office for Europe, 2015). ‘*Nutrient profile models*’ consist of classifying foods based on their nutritional composition and health outcomes. This, coupled with nutrition labelling, should lead to a steady decrease and limitation in the overall demand for red meat among European consumers. Furthermore, according to the theoretical framework by Atkin and Rice (2017), the development of public awareness campaigns regarding the water-unsustainable state of the livestock sector and the health consequences of its excessive consumption would likely shift further lower red meat demand. As analysed by Wakefield et al. (2010, fig. 1), mass health campaigns (tobacco, road safety) have proven effective in positively changing behaviours. A decrease in the demand for red meat would certainly impact supply and disincentivise further production. In addition, custom duties for red meat products under the GSP+ would incentivize red meat industries like that of Pakistan to rethink their participation in the European market – and hopefully also their aggregate production of the commodity at large.

Conclusion

The production and consumption of red meat have enormous impacts on water management (as concerns both quantity and quality of resources). However, the opening of the EU red meat market to Pakistan under the GSP+, coupled with high demand, incentivize the country to increase production. This issue is especially pressing in the case of Pakistan due to its already high water-stress levels. Though the European Union is not directly accountable for the path taken by the Pakistani red meat industry, it indirectly influences its dynamics – and does so by contradicting its own fundamental environmental values. Thus, the core of the solution would consist in re-establishing coherence in EU policy. This may be achieved by further legislating the food market, revising the ‘*duty-free*’ clause of the GSP+ trade agreement as concerns red meat products, and by implementing some public awareness campaigns directed to EU consumers.

References:

- Aslam, M., & Prathapar, S. A. (2006). *Strategies to Mitigate Secondary Salinization in the Indus Basin of Pakistan: A Selective Review* (No. 97). International Water Management Institute.
https://www.researchgate.net/publication/42764909_Strategies_to_Mitigate_Secondary_Salinization_in_the_Indus_Basin_of_Pakistan_A_Selective_Review
- Atkin, C. K., & Rice, R. E. (2017). Theory and Principles of Public Communication Campaign. In *Public Communication Campaigns* (Fourth Edition). Thousand Oaks: SAGE.
- B. P. Weidema, Wesnaes, M., Hermansen, J., Kristensen, T., & Halberg, N. (2008). *Environmental improvement potentials of meat and dairy products* [JRC Scientific and Technical Reports]. European Commission.
<https://data.europa.eu/doi/10.2791/38863>
- Consumers, Health, Agriculture and Food Executive Agency. (2021). *Campaigns map and statistics*. Chafea - Promotion of Agricultural Products.
<https://ec.europa.eu/chafea/agri/en/campaigns/map-and-statistics-target-countries>
- Consumers, Health, Agriculture and Food Executive Agency. (2021). *What a wonderful beef*. Chafea - Promotion of Agricultural Products.
<https://ec.europa.eu/chafea/agri/en/campaigns/what-wonderful-beef>
- Department of Anatomy, University of Agriculture Faisalabad. (2018). Association of Water and Livestock Production in Pakistan. *Agro Veterinary News*.
<https://avnpc.com/association-of-water-and-livestock-production-in-pakistan/>
- Enhancing Livestock Sector Export Competitiveness* (Policy Recommendations Paper). (n.d.). Trade related technical assistance programme.
- Europe Environment Agency. (2019). *Food consumption – animal based protein*.
<https://www.eea.europa.eu/airs/2018/resource-efficiency-and-low-carbon-economy/food-consumption-animal-based>

- European Commission. (2019). *The CAP and climate change*.
https://ec.europa.eu/info/food-farming-fisheries/sustainability/environmental-sustainability/climate-change_en#climatechangemitigation
- European Commission. (2020). *Food-Based Dietary Guidelines in Europe*. EU Science Hub - The European Commission's Science and Knowledge Service. <https://ec.europa.eu/jrc/en/health-knowledge-gateway/promotion-prevention/nutrition/food-based-dietary-guidelines>
- European Commission. (2020). *The EU Water Framework Directive—Integrated river basin management for Europe*.
https://ec.europa.eu/environment/water/water-framework/index_en.html
- Finance Division Government of Pakistan. (2020). Agriculture. In *Pakistan Economic Survey 2019-20* (pp. 17–43).
http://www.finance.gov.pk/survey_1920.html
- Food and Agriculture Organization of the United Nations. (2011). *AQUASTAT Country Profile-Pakistan*. <http://www.fao.org/aquastat/fr/countries-and-basins/country-profiles/country/PAK>
- Mekonnen, M. M., & Hoekstra, A. Y. (2012). A Global Assessment of the Water Footprint of Farm Animal Products. *Ecosystems*, 15(3), 401–415.
<https://doi.org/10.1007/s10021-011-9517-8>
- Morales, E. S. (2018). Why is policy coherence essential for achieving the 2030 Agenda? *United Nations System Staff College*.
<https://www.unssc.org/news-and-insights/blog/why-policy-coherence-essential-achieving-2030-agenda/>
- Organization for Economic Cooperation and Development, & Food and Agriculture Organization. (2020). *The OECD-FAO Agricultural Outlook 2020-2029*. OECD Publishing. <https://doi.org/10.1787/19991142>
- Qureshi, R. H., & Ashraf, M. (2019). *Water Security Issues of Agriculture in Pakistan*. Pakistan Academy of Sciences.
- Regulation (EU) No 978/2012 of the European Parliament and of the Council of 25 October 2012 applying a scheme of generalised tariff preferences and

- repealing Council Regulation (EC) No 732/2008, Pub. L. No. 32012R0978, 303 OJ L (2012). <http://data.europa.eu/eli/reg/2012/978/oj/eng>
- Ritchie, H., & Roser, M. (2019). Meat and Dairy Production. *Our World in Data*. <https://ourworldindata.org/meat-production>
- Sardar, A., Javed, I., Rehaman, A., Yasin, M., Saqib, R., Bakhsh, A., Javaid, H., & Luqman, M. (2019). Potential Markets for Beef: An Evidence from Pakistani Beef Industry. *Sahrad Journal of Agriculture*, 35(3), 686–695. <http://dx.doi.org/10.17582/journal.sja/2019/35.3.686.695>
- Sohaib, M., & Jamil, F. (2017). An Insight of Meat Industry in Pakistan with Special Reference to Halal Meat: A Comprehensive Review. *Korean Journal for Food Science of Animal Resources*, 37(3), 329–341. <https://doi.org/10.5851/kosfa.2017.37.3.329>
- Steinfeld, H., Gerber, P., Wassenaar, T., Castel, V., Rosales, M., & de Haan, C. (2006). Livestock's role in water depletion and pollution. In *Livestock's long shadow-environmental issues and options* (pp. 125–179). Food and Agriculture Organization of the United Nations. https://www.researchgate.net/publication/239524071_Livestock's_Long_Shadow_Environmental_Issues_and_Options
- United Nation Development Programme Pakistan. (2016). Water Security in Pakistan: Issues and Challenges. In *Development Advocate Pakistan* (Vol. 3). United Nations Development Programme. https://www.pk.undp.org/content/pakistan/en/home/library/development_policy/development-advocate-pakistan--volume-3--issue-4.html
- United Nations. (n.d.). *THE 17 GOALS*. Retrieved 21 December 2020, from <https://sdgs.un.org/goals>
- Wakefield, M. A., Loken, B., & Hornik, R. C. (2010). Use of mass media campaigns to change health behaviour. *Lancet*, 376. [https://doi.org/10.1016/S0140-6736\(10\)60809-4](https://doi.org/10.1016/S0140-6736(10)60809-4)
- WaterAid Global. (n.d.). *Pakistan*. Retrieved 22 December 2020, from <https://www.wateraid.org/where-we-work/pakistan>

- Weidema, B. P., Wesnaes, M., Hermansen, J., Kristensen, T., & Halberg, N. (2008). *Environmental Improvement Potentials of Meat and Dairy Products (EUR 23491)*. <https://doi.org/10.2791/38863>
- WHO Regional Office for Europe. (2015). *Nutrient Profile Model*. World Health Organization. <https://www.euro.who.int/en/health-topics/disease-prevention/nutrition/publications/2015/who-regional-office-for-europe-nutrient-profile-model-2015>
- World Cancer Research Fund, & American Institute for Cancer Research. (2018). *Recommendations and public health and policy implications* (third; Continuous Update Project Report). <https://www.wcrf.org/dietandcancer>
- World Commission on Environment and Development. (1987). *Our Common Future*. Oxford University Press.

19 Avenue des Arts 2nd floor, 1210 Brussels, Belgium
E 0833.606.320 RPM Bruxelles
Email: info@sadf.eu Web: www.sadf.eu