



INDIA – MEASURES CONCERNING SUGAR AND SUGARCANE

REPORTS OF THE PANELS

Appendix

This *supplement* contains the Appendix to the Reports of the Panels to be found in documents WT/DS579/R, WT/DS580/R, and WT/DS581/R.

APPENDIX

CALCULATION OF INDIA'S MARKET PRICE SUPPORT TO SUGARCANE PRODUCERS FOR THE 2014-15 TO 2018-19 SUGAR SEASONS

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1 INTRODUCTION

1.1. In the circumstances of these disputes, we consider it appropriate to assess India's compliance with Article 7.2(b) of the Agreement on Agriculture by determining whether India's product-specific AMS to sugarcane producers for each sugar season from 2014-15 to 2018-19 was in excess of the amount that India is permitted to provide pursuant to the Agreement.¹ We recall that, according to the complainants, India's product-specific AMS to sugarcane producers consists of: (i) market price support; and (ii) non-exempt direct payments or other non-exempt policies.² This Appendix addresses India's alleged market price support to sugarcane producers.

1.2. Paragraph 8 of Annex 3 of the Agreement on Agriculture describes the methodology for calculating the level of market price support provided by a Member. Under paragraph 8, "market price support shall be calculated using the gap between a fixed external reference price [FERP] and the applied administered price [AAP] multiplied by the quantity of production eligible [QEP] to receive the applied administered price". This can be expressed mathematically as:

$$\text{Market price support} = (\text{FERP} - \text{AAP}) * (\text{QEP})$$

1.3. In support of their claim under Article 7.2(b) of the Agreement on Agriculture, the complainants apply the methodology set out in paragraph 8 of Annex 3 to determine India's market price support to sugarcane producers during each sugar season from 2014-15 to 2018-19. With respect to each component of the calculation, the complainants present considerable evidence and argumentation. Regarding the FERP, the complainants note that, pursuant to paragraph 9 of Annex 3, the FERP may be adjusted for quality differences.³ On that basis, the complainants calculate an adjusted FERP for different States and seasons, using the methodology set out in India's Supporting Tables identified in its Schedule.⁴ As to the AAP, the complainants assert that India's Central Government, as well as certain State Governments, set mandatory minimum prices for sugarcane that constitute AAPs within the meaning of the Agreement on Agriculture.⁵ In order to calculate both the adjusted FERP and the amount of the AAP, the complainants provide evidence of the "recovery rate" (i.e. the "amount of sugar that can be extracted from sugarcane"⁶) in different States.⁷ Regarding the QEP, the complainants provide evidence of the total sugarcane production in different States in India.⁸ Using these data, the complainants apply the paragraph 8 methodology to calculate the total market price support that India provided to sugarcane producers for each season from 2014-15 to 2018-19.⁹

1.4. India argues that the mandatory minimum prices identified by the complainants do not constitute market price support, within the meaning of the Agreement on Agriculture, because they

¹ See para. 7.11 of the Panel Report. We recall that, for the reasons explained in fn 75 to para. 7.9 of the Panel Report, it is unnecessary for us to address the complainants' claims under Articles 3.2 and 6.3 of the Agreement on Agriculture.

² See para. 7.19 of the Panel Report.

³ Brazil's first written submission, para. 146; Australia's first written submission, para. 161; Guatemala's first written submission, para. 146.

⁴ Brazil's first written submission, para. 148; Brazil's Calculation of India's Domestic Support for Sugarcane, (Exhibit BRA-1 (revised-3)), "FERP" spreadsheet; Australia's first written submission, paras. 161-162; Australia's Domestic Support Calculations, (Exhibit AUS-1 (revised 23 March 2021)), "FERP" spreadsheet; Guatemala's first written submission, para. 147; Guatemala's Calculations of India's AMS (Exhibit GTM-45 (revised 12 May 2021)), "FERP details" spreadsheet.

⁵ Brazil's first written submission, paras. 24-48, 135-139 and 156; Australia's first written submission, paras. 23-61 and 153-156; Guatemala's first written submission, paras. 37-72 and 140-144.

⁶ Guatemala's first written submission, para. 40. See also Brazil's first written submission, para. 32; Australia's first written submission, para. 28.

⁷ Brazil's first written submission, Table C-1; Australia's first written submission, Table 16; Guatemala's first written submission, Table 2.

⁸ Brazil's first written submission, Table C-8; Australia's first written submission, Table 17; Guatemala's first written submission, Table 8.

⁹ See Brazil's Calculation of India's Domestic Support for Sugarcane, (Exhibit BRA-1 (revised-3)); Australia's Domestic Support Calculations, (Exhibit AUS-1 (revised 23 March 2021)); Guatemala's Calculations of India's AMS (Exhibit GTM-45 (revised 12 May 2021)).

do not entail government purchase or procurement of the sugarcane.¹⁰ India does not, however, contest the accuracy of the evidence or calculations provided by the complainants.¹¹

1.5. In paragraphs 7.37 to 7.61 of the Panel Report, we have addressed the parties' disagreement over whether market price support, within the meaning of the Agreement on Agriculture, can only exist where there is government purchase or procurement of the relevant agricultural product. We have concluded that there is no such requirement, and that the existence of market price support depends on the existence and amount of the FERP, AAP, and QEP.¹² In this Appendix, we address the existence and amount of the FERP, AAP, and QEP, and apply the paragraph 8 methodology to determine the amount of market price support for sugarcane producers, if any, that India maintained during each sugar season from 2014-15 to 2018-19.

1.6. We proceed by first describing the relevant legal instruments through which India allegedly provides market price support. We then examine the existence and amount of the AAP, the FERP, and the QEP. Finally, we apply the calculation methodology set out in paragraph 8 in order to determine the amount of market price support, if any, that India provided to sugarcane producers during each sugar season from 2014-15 to 2018-19.

2 RELEVANT LEGAL INSTRUMENTS

2.1. The complainants assert that India maintains mandatory minimum prices payable by purchasers of sugarcane. The complainants identify two sets of such mandatory minimum prices: (i) the "Fair and Remunerative Price" (FRP), allegedly set by the Central Indian Government¹³; and (ii) certain State-Advised Prices (SAPs) set by six individual State Governments within India.¹⁴ According to the complainants, in States where an SAP is applied, the sugar producers are required to pay the SAP instead of the FRP when the former is higher than the latter.¹⁵

2.2. India does not contest, as a factual matter, the complainants' description of the FRP and SAPs.

2.3. Having reviewed the evidence and assertions of the parties, we find that India maintains mandatory minimum prices for sugarcane, payable by sugar producers (i.e. sugar mills and factories that process sugarcane into sugar), in the form of: (i) the FRP, set on an annual basis by the Central Indian Government; and (ii) various SAPs, set on an annual basis by certain State Governments in India. We also understand that, in States where an SAP is applied, sugar producers are required to pay whichever is the higher price as between the FRP and SAPs.¹⁶ For the sake of clarity, we consider it useful to identify, below, the content and operation of the FRP and SAPs.

2.1 Fair and Remunerative Price

2.4. The FRP is established by, and maintained through, the following legal instruments: the Essential Commodities Act of 1955¹⁷ ("Essential Commodities Act"); the Sugarcane (Control) Order

¹⁰ See paras. 7.20, 7.30, and 7.38 of the Panel Report.

¹¹ According to India, its silence with respect to certain aspects of the complainants' arguments should not be construed as assent. (India's responses to questions from the Panel at the first meeting of the Panel)

¹² See para. 7.59 of the Panel Report.

¹³ Brazil's first written submission, paras. 25-34 and 134-155; Australia's first written submission, paras. 23-39 and 166-173; Guatemala's first written submission, paras. 37-50 and 137-165.

¹⁴ Brazil's first written submission, paras. 35-48 and 156-160; Australia's first written submission, paras. 41-61 and 174-180; Guatemala's first written submission, paras. 51-72 and 137-165.

¹⁵ Brazil's first written submission, para. 35; Australia's first written submission, para. 41; Guatemala's first written submission, para. 140.

¹⁶ As clarified by the Supreme Court of India, sugarcane prices fixed by State governments are "statutory prices" and must be complied with by the sugar mills. (Judgment of the Supreme Court of India, *U.P. Co-operative Cane Unions Federations v. West U.P. Sugar Mills Association & Ors. Etc.*, 5 May 2004, (Exhibit JE-49), para. 39) Furthermore, India confirms that "prices that may be set by State orders or enactments do not operate cumulatively with the FRP. If the SAP is higher than the FRP, sugar mills procure sugarcane at the SAP and not at the sum of the FRP and SAP." (India's response to Panel question No. 67)

¹⁷ Essential Commodities Act, (Exhibit JE-43).

of 1966¹⁸ ("Sugarcane Control Order"); and various notifications published in the Official Gazette by the Department of Food and Public Distribution.¹⁹

2.5. The Essential Commodities Act empowers the Central Government to issue orders "for the control of the production, supply and distribution of, and trade and commerce, in certain commodities".²⁰ Section 3, titled "Powers to control production, supply, distribution, etc., of essential commodities", grants the power to the Central Government to regulate, *inter alia*, the production and sale of sugar and sugarcane.²¹

2.6. The Sugarcane Control Order cites Section 3 of the Essential Commodities Act as its legislative basis.²² Clause 2 of the Sugarcane Control Order, titled "Definitions", defines the "fair and remunerative price of sugarcane" as "the price fixed by the Central Government under clause 3, from time to time, for sugarcane".²³ Clause 3 is titled "Fair and remunerative price of sugarcane payable by producer[s] of sugar".²⁴ Clause 3(1) explains that the Central Government "may, after consultation with such authorities, bodies or associations as it may deem fit, by notification in the Official Gazette, from time to time, fix the fair and remunerative price of sugarcane to be paid by producers of sugar or their agents for the sugarcane purchased by them".²⁵ Clause 3(2) indicates that "[n]o person shall sell or agree to sell sugarcane to a producer of sugar or his agent, and no such producer or agent shall purchase or agree to purchase sugarcane, at a price lower than that fixed under sub-clause (1)".²⁶

2.7. As indicated, pursuant to Clause 3(1) of the Sugarcane Control Order, the precise amount of the FRP is set out in the relevant notification published in the Official Gazette, and such notifications may be made "from time to time". From our review of the evidence, we understand that these notifications are published annually and set the FRP for specific sugar seasons.²⁷

2.8. We also note that notifications appear to follow a particular pattern in setting the price for a given sugar season. Based on the evidence before us, we understand that the FRP for each sugar season generally consists of: (i) a base or minimum price that is payable regardless of how low the recovery rate of the sugarcane may be, and (ii) a premium rate that is added to the base price, on an incremental basis, depending on the margin by which the sugarcane recovery rate exceeds a certain threshold (or "basic") recovery rate.²⁸ We understand that the recovery rate of sugarcane is

¹⁸ Sugarcane (Control) Order, (Exhibit JE-45).

¹⁹ See e.g. Notification of 1 October 2015, (Exhibit AUS-19); Notification of 30 September 2016, (Exhibit AUS-20); and Notification of 27 September 2017, (Exhibit AUS-22).

²⁰ Essential Commodities Act, (Exhibit JE-43), preamble, p. 2.

²¹ Essential Commodities Act, (Exhibit JE-43), Section 3, pp. 3-7.

²² Sugarcane (Control) Order, (Exhibit JE-45), preamble, p. 55.

²³ Sugarcane (Control) Order, (Exhibit JE-45), Clause 2(cc), p. 56.

²⁴ Sugarcane (Control) Order, (Exhibit JE-45), Clause 3, p. 57. (footnote omitted)

²⁵ Sugarcane (Control) Order, (Exhibit JE-45), Clause 3(1), p. 57. Clause 3(1) also elaborates on the factors to be taken into account by the Central Government when fixing the FRP, namely: (a) the cost of production of sugarcane; (b) the return to the grower from alternative crops and the general trend of prices of agricultural commodities; (c) the availability of sugar to the consumer at a fair price; (d) the price at which sugar produced from sugarcane is sold by producers of sugar; (e) the recovery of sugar from sugarcane; (f) the realization made from sale of by-products such as molasses, bagasse and press mud or their imputed value; and (g) reasonable margins for the growers of sugarcane on account of risk and profits.

²⁶ Sugarcane (Control Order), (Exhibit JE-45), Clause 3(2), p. 58. The Sugarcane Control Order defines "producer of sugar" as "a person carrying on the business of manufacturing sugar by vacuum pan process and at its own option, ethanol either directly from sugarcane juice or from molasses, including B-Heavy molasses, or both". (Ibid. Clause 2(i), p. 57)

²⁷ We come to this conclusion based on our review of the evidence identified in fns 31-35 to para. 2.9 below.

²⁸ To use an example, we understand that for the 2012-13 sugar season the relevant Notification sets out the mandatory minimum price as follows: a base price of INR 170 per 100 kilograms, with an additional premium of INR 1.79 per 100 kilograms for every 0.1% increase in the recovery rate above a basic (threshold) recovery rate of 9.5%. (Order of 22 October 2013, (Exhibit AUS-17), p. 22) Sugarcane farmers therefore received a minimum price of INR 170 per 100 kilograms of sugarcane, regardless of the actual rate of recovery. In addition, if the recovery rate of a particular farmer's product exceeded 9.5%, then the sugar producer was obliged to pay to the sugarcane farmer an additional INR 1.79 per 100 kilograms for every 0.1% increase above the basic recovery rate. Thus, if a farmer's sugarcane had a recovery rate of 10%, the farmer would be paid INR $[170 + (5 \times 1.79) = 178.95]$ per 100 kilograms of sugarcane.

"the proportion of sugar produced by weight of cane processed, usually expressed as a percentage".²⁹

2.9. Based on our review of the evidence, we note that, for each sugar season from 2014-15 to 2018-19, the FRP was:

- a. For the 2014-15 sugar season: INR 220 per 100 kilograms³⁰, at a basic recovery rate of 9.5%, with an additional premium of INR 2.32 per 100 kilograms for every 0.1% increase in recovery rate³¹;
- b. For the 2015-16 sugar season: INR 230 per 100 kilograms, at a basic recovery rate of 9.5%, with an additional premium of INR 2.42 per 100 kilograms for every 0.1% increase in recovery rate³²;
- c. For the 2016-17 sugar season: INR 230 per 100 kilograms, with a basic recovery rate of 9.5% and an additional premium of INR 2.42 per 100 kilograms for every 0.1% increase in recovery rate³³;
- d. For the 2017-18 sugar season: INR 255 per 100 kilograms, with a basic recovery rate of 9.5% and an additional premium of INR 2.68 per 100 kilograms for every 0.1% increase in recovery rate³⁴; and
- e. For the 2018-19 sugar season, the FRP was structured slightly differently: a base price of INR 275 per 100 kilograms was set at a threshold recovery rate of 10%, with a premium of INR 2.75 for each 0.1% increase in recovery rate above 10%; for sugarcane with a recovery rate between 9.5% and 10%, the price was reduced by INR 2.75 for every 0.1% decrease in recovery rate below 10%, down to a minimum lower threshold level of 9.5%; finally, for sugarcane with a recovery rate equal to or lower than 9.5%, a base price of INR 261.25 per 100 kilograms was set.³⁵

2.2 State-Advised Prices

2.10. The complainants identify SAPs in six States in India: Bihar, Haryana, Punjab, Tamil Nadu, Uttar Pradesh, and Uttarakhand. Before describing the content and operation of these six SAPs, we note that five of these States (Bihar, Haryana, Punjab, Uttar Pradesh, and Uttarakhand) maintain

²⁹ Brazil's first written submission, para. 32 (referring to Exhibit JE-48). See also Australia's first written submission, para. 28 (referring to Exhibit JE-48); and Guatemala's first written submission, para. 40 and fn 54 thereto. India does not contest this explanation.

³⁰ We note that India's notifications of the FRP consistently use the unit of value of *quintals*. We understand that a *quintal* is a unit of weight and one *quintal* signifies one hundred (100) kilograms. (See Brazil's first written submission, fn 3 to Table 1; Australia's first written submission, p. 27; Guatemala's first written submission, p. v). For our purposes, we convert all measurements of weight to kilograms and (where necessary) tonnes.

³¹ DFPD Communication: Fixation of FRP 2014-15 season, 14 February 2014, (Exhibit JE-2); Notification of 1 October 2015, (Exhibit AUS-19).

³² DFPD Communication: Fixation of FRP for 2015-16 season, 2 February 2015, (Exhibit JE-4); Press Release, Press Information Bureau, 16 January 2015, (Exhibit JE-3); Notification of 30 September 2016, (Exhibit AUS-20).

³³ Notification of 27 September 2017, (Exhibit AUS-22); CACP Price Policy for Sugarcane: 2016-17 Sugar Season, (Exhibit JE-5). We are aware that the complainants also adduce a newspaper report that indicates a different amount with respect to the premium rate. (See "Govt keeps cane FRP unchanged at Rs 230 per qtl for 2016-17", India Today, 6 April 2016, (Exhibit JE-47)) We agree with the parties that we should give greater weight to the official government sources than to this newspaper report. We also note India's confirmation of the FRP for the 2016-17 season through responses to questions. (See parties' responses to Panel question No. 68)

³⁴ DFPD Communication: Fixation of FRP for 2017-18 season, 1 June 2017, (Exhibit JE-7); Press Release, Press Information Bureau, 24 May 2017, (Exhibit JE-6).

³⁵ DFPD Communication: Fixation of FRP for 2018-19 sugar season, 20 July 2018, (Exhibit JE-9); Press Release, Press Information Bureau, 18 July 2018, (Exhibit JE-8). We are aware that the complainants also adduce additional evidence that does not contain certain of the details of the FRP as set out in Exhibits JE-8 and JE-9. (See Press Release, Press Information Bureau, 31 July 2018, (Exhibit AUS-15); Fair and Remunerative Price of Sugarcane in the Country, ISMA, (Exhibit JE-11)) We agree with the complainants, however, that these Exhibits do not necessarily contradict Exhibits JE-8 and JE-9 and, in any event, we consider Exhibits JE-8 and JE-9 to be sufficiently probative to establish the content of the FRP for the 2018-19 sugar season. (See complainants' responses to Panel question No. 69)

SAPs that distinguish among different "varieties" of sugarcane. We understand that the term "varieties" essentially refers to different types of sugarcane based on their "maturity period and quality".³⁶

2.2.1 Bihar

2.11. The State of Bihar enacted the Bihar Sugarcane (Regulation of Supply and Purchase) Act in 1981 ("Bihar Sugarcane Act").³⁷ The Bihar Sugarcane Act contains detailed provisions regulating the supply and purchase of sugarcane by sugar producers. Section 42(2) of the Bihar Sugarcane Act stipulates that the State of Bihar may determine the minimum price to be paid by factories³⁸ to sugarcane producers and that such price shall not be less than the price set under the Sugarcane Control Order.³⁹ The Act further states that "[t]he owner of the [sugar factory] shall make payment of the price of cane supplied to it immediately after the supply and on failing to do shall be liable to pay interest at the rate prescribed."⁴⁰ Chapter VI of the Act also provides for penalties, including imprisonment, for violations of the provisions of the Act.⁴¹

2.12. We note that the SAP in Bihar, for each sugar season from 2014-15 to 2018-19, was⁴²:

Bihar SAP (INR per 100 kg)					
Varieties	2014-15	2015-16	2016-17	2017-18	2018-19
Un-recommended/lower ⁴³ varieties	250	250	260	260	265
Central/general/normal varieties	260	260	280	280	290
Early/premium varieties	270	270	300	300	310

2.2.2 Haryana

2.13. Until 1966, the State of Haryana was part of the State of Punjab. Pursuant to the Punjab Sugarcane (Regulation of Purchase and Supply) Haryana Amendment Act, 2004 ("Haryana Amendment Act"), Haryana continues to apply the Punjab Sugarcane (Regulation of Purchase and Supply) Act of 1953 ("Punjab Sugarcane Act").⁴⁴ Specifically, we understand that the Haryana Amendment Act makes the entirety of the Punjab Sugarcane Act applicable in the State of Haryana,

³⁶ See India's response to Panel question No. 70(a). We also note Guatemala's explanation that "sugarcane of early and mid-varieties receives a higher SAP than sugarcane of normal varieties or unrecommended varieties ... because the variety, or type, of sugarcane has a major impact on sugar recovery rates." (Guatemala's first written submission, para. 53 (referring to Priyanka Singh, Manmohan Singh and BL Sharma, "Variation in sugar content between early and mid-late maturing sugarcane varieties across the crushing period in sub-tropical India", *Proceedings of the International Society of Sugar Cane Technologists*, volume 29, 2016, (Exhibit GTM-22))) Furthermore, "[s]ugarcane is considered to be mature and ready for harvest when the cane juice has over 16% sucrose and 85% purity. Early- and mid-varieties attain this level faster than normal or unrecommended varieties and, therefore, also have higher recovery rates." (Ibid.)

³⁷ Bihar Sugarcane Act, (Exhibit JE-50).

³⁸ The Bihar Sugarcane Act defines a "factory" as: "any premises, including the precincts thereof in any part of which sugar is manufactured by the means of vacuum-pan process; or any other sugar or sugarcane based products manufactured by any other technique or process based on sugarcane which includes sugarcane based Ethanol plant, Rectified Spirit plant and Co-generation plant". (Bihar Sugarcane Act, (Exhibit JE-50), Section 2(j), p. 1)

³⁹ Bihar Sugarcane Act, (Exhibit JE-50), Section 42(2), p. 19. Specifically, Section 42(2) states, *inter alia*, that "[t]he State Government may before the beginning of the crushing season, taking in to consideration the interest of the cane growers and the likely realisation from the sugarcane products determine by notification in the official gazette, the price of cane payable by the occupiers of the factories to the cane growers for cane supplied to them in the crushing year concerned".

⁴⁰ Bihar Sugarcane Act, (Exhibit JE-50), Section 43(4), p. 20.

⁴¹ Bihar Sugarcane Act, (Exhibit JE-50), Chapter VI, pp. 23-26.

⁴² For 2014-15, see CACP Price Policy for Sugarcane: 2018-19 Sugar Season, (Exhibit JE-52), p. 57, Annex Table 2.2. For 2015-16 to 2017-18, see CACP Price Policy for Sugarcane: 2019-20 Sugar Season, (Exhibit JE-53), p. 56, Annex Table 1.3. For 2016-17, see also Notification by the Bihar Government, 24 November 2016 (English translation), (Exhibit JE-54-B)) For 2018-19, see Riga Sugar Company Limited, Annual Report 2018-19, (Exhibit JE-55), p. 4.

⁴³ We note that: for 2014-15, the three categories of varieties are identified, in ascending order of price, as "un-recommended", "central", and "early" varieties; for 2016-17 and 2017-18, "central" varieties was replaced with "general" varieties; and for 2018-19, the three categories are, in ascending order of price, "lower", "normal", and "premium" varieties. (See the evidence referred to in fn 42 to para. 2.12 above)

⁴⁴ See Haryana Amendment Act, (Exhibit JE-56), p. 10, Section 1(1) and (2); Punjab Sugarcane Act, (Exhibit JE-59).

except for Section 14, which it replaces, and a particular clause in Section 20.⁴⁵ Hereafter, we use the term "Haryana Sugarcane Act" to refer to the Act that currently applies in Haryana (i.e. the Punjab Sugarcane Act as modified by the Haryana Amendment Act).⁴⁶

2.14. Under Section 14 of the Haryana Sugarcane Act, the State Government may, among other things, issue orders regulating the purchase, supply and price of sugarcane in an assigned area.⁴⁷ Section 20 of the Haryana Sugarcane Act authorizes the State Government to "make rules to carry out the provisions of this Act"⁴⁸, including "the method by which the minimum price of cane is to be fixed under this Act" and "the payment of the price for cane".⁴⁹ The Haryana Sugarcane Act also stipulates that "[a]s soon as the cane is supplied to a factory, the occupier of such factory shall be liable to pay the price of cane so supplied"⁵⁰ and any violation of the Act (or any rule issued thereunder) is an offence punishable by imprisonment, a fine, or both.⁵¹

2.15. In accordance with Section 20 of the Haryana Sugarcane Act, the Haryana Government enacted the Haryana Sugarcane (Regulation of Purchase and Supply) Rules, 1992 ("Haryana Sugarcane Rules"). Section 12 of the Haryana Sugarcane Rules indicates that "[a]n occupier of a factory or agent or purchasing agent of a factory or any person employed by him shall not purchase cane for a factory or pay for it at a price below the minimum price."⁵²

2.16. We note that the SAP in Haryana, for each sugar season from 2014-15 to 2018-19, was⁵³:

Haryana SAP (INR per 100 kg)					
Varieties	2014-15	2015-16	2016-17	2017-18	2018-19
Normal/late ⁵⁴ varieties	300	300	310	320	330 / 335 ⁵⁵
Mid varieties	305	305	315	325	335
Early varieties	310	310	320	330	340

2.2.3 Punjab

2.17. As mentioned above, Section 20 of the Punjab Sugarcane Act provides that "[t]he Government may make rules to carry out the provisions of this Act", including "the method by which the minimum price of cane is to be fixed under this Act", and "the payment of the price for cane."⁵⁶ Under Section 9(1) of the Punjab Sugarcane Act, "[a]ny person contravening any of the provisions of [this] Act or any rule made there under, for which no penalty is otherwise provided shall be punishable with [a] fine, which may extend to two thousand rupees."⁵⁷

2.18. In accordance with Section 20 of the Punjab Sugarcane Act, the State Government of Punjab adopted the Punjab Sugarcane (Regulation of Purchase and Supply) Rules, 1958 ("Punjab Sugarcane

⁴⁵ Haryana Amendment Act, (Exhibit JE-56), pp. 10-11.

⁴⁶ Haryana Sugarcane Act, (Exhibit JE-56), pp. 1-11.

⁴⁷ Haryana Sugarcane Act, (Exhibit JE-56), Section 14, p. 5. An "assigned area" is defined as "an area assigned to a factory under [the Haryana Sugarcane] Act". (Haryana Sugarcane Act, (Exhibit JE-56), Section 2(1), p. 1)

⁴⁸ Haryana Sugarcane Act, (Exhibit JE-56), Section 20, pp. 8-9.

⁴⁹ Haryana Sugarcane Act, (Exhibit JE-56), Section 20(i) and (l), pp. 8-9.

⁵⁰ Haryana Sugarcane Act, (Exhibit JE-56), Section 15-A(2), p. 6.

⁵¹ Haryana Sugarcane Act, (Exhibit JE-56), Section 9(1), p. 4.

⁵² Haryana Sugarcane Rules, (Exhibit JE-57), Section 12, p. 57.

⁵³ For 2014-15, see CACP Price Policy for Sugarcane: 2018-19 sugar season, (Exhibit JE-52), p. 57, Annex Table 2.2. For 2015-16 to 2017-18, see CACP Price Policy for Sugarcane: 2019-20 Sugar Season, (Exhibit JE-53), p. 56, Annex Table 1.3. For 2018-19, see Notification by the Haryana Government, 8 March 2019, (Exhibit AUS-63); and State of Haryana, Budget 2019-20: Explanatory Memorandum, (Exhibit JE-58).

⁵⁴ We note that for 2014-15 and 2015-16, the three categories of varieties are identified, in ascending order of price, as "normal", "mid", and "early", whereas for 2016-17 to 2018-19, "normal" varieties was replaced with "late" varieties. (See the evidence identified in fn 53 to para. 2.16 above)

⁵⁵ Exhibit JE-58, an explanatory memorandum concerning the Haryana State Budget, indicates that the 2018-19 SAP for "late" varieties was INR 330 per 100 kilograms, while Exhibit AUS-63, an official notification of the SAP by the Government of Haryana, indicates an SAP of INR 335 per 100 kilograms for all varieties other than "early" varieties. While we tend to consider an official notification to be more probative than an explanatory memorandum concerning the State Budget, we nevertheless do not consider it necessary to resolve this specific factual issue for the purposes of resolving the present disputes. (See fn 105 to para. 3.20 below)

⁵⁶ Punjab Sugarcane Act, (Exhibit JE-59), Section 20, p. 5.

⁵⁷ Punjab Sugarcane Act, (Exhibit JE-59), p. 3.

Rules").⁵⁸ Section 12 of the Punjab Sugarcane Rules is titled "Minimum Price" and states, *inter alia* that "[a]n Occupier or agent or purchasing agent or any person employed by him shall not purchase cane for a factory ... at a price below the minimum price, if any fixed by law."⁵⁹

2.19. We note that the SAP in Punjab, for each sugar season from 2014-15 to 2018-19, was⁶⁰:

Punjab SAP (INR per 100 kg)					
Varieties	2014-15	2015-16	2016-17	2017-18	2018-19
Normal/late/lower ⁶¹ varieties	280	280	285	295	295 ⁶²
Mid/medium varieties	285	285	290	300	300
Early/advance varieties	295	295	300	310	310

2.2.4 Tamil Nadu

2.20. Section 12 of the Tamil Nadu Sugar Factories Control Act, 1949 ("Tamil Nadu Sugarcane Act") stipulates that:

The Government may, at any time before the commencement of a crushing season, after consulting the Advisory Committee, by notification, specify either generally or in respect of any factory, either the price which the occupier of a factory shall be bound to pay for any sugarcane purchased by him during the season or the method of calculating such price:

Provided that the Government may specify different prices or different methods of calculating the prices of different varieties of sugarcane.⁶³

2.21. Compliance with the sugarcane price is mandatory pursuant to Section 13 of the Act. Violations are punishable with a fine, imprisonment or both.⁶⁴

2.22. We note that the SAP in Tamil Nadu for each sugar season from 2014-15 to 2017-18 was:

⁵⁸ Punjab Sugarcane Rules, (Exhibit JE-60), preamble, p. 1.

⁵⁹ Punjab Sugarcane Rules, (Exhibit JE-60), Section 12(1), p. 4.

⁶⁰ For 2014-15, see CACP Price Policy for Sugarcane: 2018-19 Sugar Season, (Exhibit JE-52), p. 57, Annex Table 2.2. For 2015-16 to 2017-18, see CACP Price Policy for Sugarcane: 2019-20 Sugar Season, (Exhibit JE-53), p. 56, Annex Table 1.3. For 2018-19, see Notification by the Punjab Government, 28 November 2019, (Exhibit JE-61); and "Punjab Govt to pay Rs 25 per quintal directly to cane farmers", *The Tribune*, 6 December 2018, (Exhibit AUS-66), p. 2.

⁶¹ We note that: for 2014-15 and 2015-16, the three categories of varieties are identified, in ascending order of price, as "normal", "mid", and "early"; for 2016-17 and 2017-18 "normal" varieties was replaced with "late" varieties; and for 2018-19 the three categories are referred to as either "late", "mid" and "early" or "lower", "medium", and "advance/early". (See the evidence referred to in fn 60 to para. 2.19 above)

⁶² We note that the State Government Notification of the SAP for the 2018-19 season indicates that "Sugarcane Medium and Lower varieties rates will be equal to advance/early varieties after 15th January". (Notification by the Punjab Government, 28 November 2019, (Exhibit JE-61)) In response to questions seeking clarity regarding this aspect of the SAP, Brazil indicates that "India is in the best position to set out the meaning of the explanatory note". (Brazil's response to Panel question No. 71(d), para. 82) Australia states that it "is not able to explain the meaning of the note". (Australia's response to Panel question No. 71(d), para. 68) Guatemala considers that the explanatory note "appears to mean that the higher 'advance and early varieties' SAPs would be applicable to medium and lower varieties after 15 January 2019". (Guatemala's response to Panel question No. 71(d), para. 65) India states that "the complainants are best placed to explain the calculations adopted by them". (India's response to Panel question No. 71(d)) In light of this lack of clarity regarding the meaning of the explanatory note, we refrain from adjusting the SAP rates on the basis of that note.

⁶³ Tamil Nadu Sugarcane Act, (Exhibit JE-67), Section 12(1), p. 42. A "factory" is defined as "any premises, including the precincts thereof, wherein ten or more workers are working or were working on any day of the preceding twelve months and in any part of which any manufacturing process connected with the production of sugar by means of vacuum pans is being carried on or is ordinarily carried on with the aid of power". (Ibid. Section 2(c), p. 36)

⁶⁴ Tamil Nadu Sugarcane Act, (Exhibit JE-67), Section 13(2)(b), pp. 42-43.

- a. For the 2014-15 sugar season: INR 265 per 100 kilograms, at a basic recovery rate of 9.5%, with an additional premium of either INR 2.21 or INR 2.32 per 100 kilograms for every 0.1% increase in recovery rate⁶⁵;
- b. For the 2015-16 sugar season: INR 285 per 100 kilograms, at a basic recovery rate of 9.5%, with an additional premium of INR 2.42 per 100 kilograms for every 0.1% increase in recovery rate⁶⁶;
- c. For the 2016-17 sugar season: INR 285 per 100 kilograms, with a basic recovery rate of 9.5% and an additional premium of INR 2.42 per 100 kilograms for every 0.1% increase in recovery rate⁶⁷; and
- d. For the 2017-18 sugar season: INR 285 per 100 kilograms, with a basic recovery rate of 9.5% and an additional premium of INR 2.68 per 100 kilograms for every 0.1% increase in recovery rate.⁶⁸

2.23. In October 2018, Tamil Nadu adopted the Tamil Nadu Sugarcane (Regulation of Purchase Price) Act, replacing the SAP with a system of "revenue sharing based sugarcane price".⁶⁹ We therefore understand that Tamil Nadu did not maintain any SAP for the 2018-19 sugar season.

2.2.5 Uttar Pradesh

2.24. Section 16(1) of The Uttar Pradesh Sugarcane (Regulation of Supply and Purchase) Act, 1953 ("Uttar Pradesh Sugarcane Act") states that "[t]he State Government may, for maintaining supplies, by order, regulate- (a) the distribution, sale or purchase of any cane ... in any reserved area or assigned area; and (b) purchase of cane in any area other than a reserved or assigned area."⁷⁰ Section 17(1) provides that "[t]he occupier of a factory shall make such provision for speedy payment of the price of cane purchased by him as may be prescribed".⁷¹ Under Section 17(2), "the occupier of a factory shall be liable to pay immediately the price of the cane so supplied".⁷² Failure to comply with the obligations under the Uttar Pradesh Sugarcane Act is punishable by a fine,

⁶⁵ Order of 14 January 2015, (Exhibit JE-62); CACP Price Policy for Sugarcane: 2018-19 Sugar Season, (Exhibit JE-52), p. 57, Annex Table 2.2. This amount includes transport costs. We note that, according to the Indian Government publication Price Policy for Sugarcane: 2018-19 Sugar Season, the premium rate was INR 2.21 per 100 kilograms, whereas the official Order by the Government of Tamil Nadu indicates a premium rate of INR 2.32 per 100 kilograms. We tend to consider the official Order by the Government of Tamil Nadu to be more probative than the Price Policy for Sugarcane publication. We note, however, that since the average recovery rate in Tamil Nadu during the 2014-15 sugar season did not exceed the basic recovery rate stipulated in the SAP, it is not necessary to resolve this issue. (See para. 3.11 below)

⁶⁶ CACP Price Policy for Sugarcane: 2019-20 Sugar Season, (Exhibit JE-53), p. 56, Annex Table 1.3; Order of 11 January 2016, (Exhibit JE-63). This amount includes transport costs.

⁶⁷ CACP Price Policy for Sugarcane: 2019-20 Sugar Season, (Exhibit JE-53), p. 56, Annex Table 1.3; Order of 5 January 2017, (Exhibit JE-64). This amount includes transport costs.

⁶⁸ CACP Price Policy for Sugarcane: 2019-20 Sugar Season, (Exhibit JE-53), p. 56, Annex Table 1.3. This amount includes transport costs. We note that the complainants also adduce two Tamil Nadu Government Orders that refer to the SAP for the 2017-18 sugar season, but which do not identify any premium rate. We agree with Australia that this is most likely because those Government Orders "relate to Tamil Nadu's production incentive payment" and "the premium was not relevant to the calculation of the production incentive payment". (Australia's response to Panel question No. 71(c), para. 65) We also note that the amount of the premium is not directly relevant to the present disputes, as the average recovery rate in Tamil Nadu during the 2017-18 sugar season did not exceed the basic recovery rate. (See para. 3.11 below)

⁶⁹ Tamil Nadu Sugarcane (Regulation of Purchase Price) Act, 2018, (Exhibit JE-65), p. 96. See also Order of 17 September 2018, (Exhibit JE-88).

⁷⁰ Uttar Pradesh Sugarcane Act, (Exhibit JE-68), Section 16(1), p. 104.

⁷¹ Uttar Pradesh Sugarcane Act, (Exhibit JE-68), Section 17(1), p. 105. A "factory" is defined as "any premises including the precincts thereof wherein twenty or more workers are working or [sic] on any day during the preceding twelve months and in any part of which any manufacturing process connected with the production of sugar by means of vacuum pan process or ethanol either directly from sugarcane juice or molasses, including B-Heavy molasses, or both as the case may be, is being carried on or is ordinarily carried on with the aid of mechanical power." (Ibid. para. 3(j), p. 93)

⁷² Uttar Pradesh Sugarcane Act, (Exhibit JE-68), Section 17(2), p. 105.

imprisonment, or both.⁷³ The Supreme Court of India has interpreted the Uttar Pradesh Sugarcane Act as granting the State Government "the regulatory power ... to fix the price of the sugarcane".⁷⁴

2.25. We note that the SAP in Uttar Pradesh, for each sugar season from 2014-15 to 2018-19, was⁷⁵:

Uttar Pradesh SAP (INR per 100 kg)					
Varieties	2014-15	2015-16	2016-17	2017-18	2018-19
Rejected/normal ⁷⁶ varieties	275	275	300	310	310
Normal/mid varieties	280	280	305	315	315
Early varieties	290	290	315	325	325

2.2.6 Uttarakhand

2.26. We understand that the State of Uttarakhand was previously part of the State of Uttar Pradesh. The Uttarakhand Sugarcane (Regulation of Purchase and Supply) (Amendment) Act, 2013 ("Uttarakhand Amendment Act"), indicates that the Uttar Pradesh Sugarcane Act, as amended, applies in Uttarakhand.⁷⁷ Since Sections 16 and 17 of the Uttar Pradesh Sugarcane Act were not amended by the Uttarakhand Amendment Act, we understand that these provisions are also applicable in Uttarakhand.

2.27. We note that the SAP in Uttarakhand, for each sugar season from 2014-15 to 2018-19, was⁷⁸:

Uttarakhand SAP (INR per 100 kg)					
Varieties	2014-15	2015-16	2016-17	2017-18	2018-19
Rejected varieties	n/a	n/a	302	306	n/a
General/normal ⁷⁹ varieties	280	280	307	316	317
Early varieties	290	290	317	326	327

3 APPLIED ADMINISTERED PRICE

3.1 General

3.1. Paragraph 8 of Annex 3 of the Agreement on Agriculture identifies the "applied administered price" (AAP) as one of the components of the methodology to calculate market price support.

3.2. The complainants submit that the FRP and SAPs constitute AAPs because they fix mandatory prices for sugarcane that differ from the market price and which must be paid by sugar producers.⁸⁰ Based on the operation of the measures, the complainants assert that the amount of the FRP and the SAP in Tamil Nadu depend, in part, on the recovery rate of the sugarcane being purchased.⁸¹ In

⁷³ Uttar Pradesh Sugarcane Act, (Exhibit JE-68), Section 22, p. 110.

⁷⁴ Judgment of the Supreme Court of India, *U.P. Co-operative Cane Unions Federations v. West U.P. Sugar Mills Association & Ors. Etc.*, 5 May 2004, (Exhibit JE-49), para. 26.

⁷⁵ For 2014-15, see CACP Price Policy for Sugarcane: 2018-19 Sugar Season, (Exhibit JE-52), p. 57, Annex Table 2.2. For 2015-16 to 2017-18, see CACP Price Policy for Sugarcane: 2019-20 Sugar Season, (Exhibit JE-53), p. 56, Annex Table 1.3; and Notification of 26 October 2017 (English translation), (Exhibit JE-70-B). For 2018-19, see Notification of 1 December 2018 (English translation), (Exhibit JE-69-B).

⁷⁶ We note that: for 2014-15 to 2017-18, the CACP Price Policy for Sugarcane publications refer to the three categories of varieties, in ascending order of price, as "rejected", "normal", and "early". For 2017-18, the Notification by the Government of Uttar Pradesh refers to "mid" varieties instead of "normal" varieties. For 2018-19, the three categories, in ascending order of price, are: "normal", "mid", and "early" varieties. (See fn 75 to para. 2.25 above)

⁷⁷ Uttarakhand Amendment Act, (Exhibit JE-71), preamble, p. 1.

⁷⁸ For 2014-15, see CACP Price Policy for Sugarcane: 2018-19 Sugar Season, (Exhibit JE-52), p. 57, Annex Table 2.2. For 2015-16 to 2017-18, see CACP Price Policy for Sugarcane: 2019-20 Sugar Season, (Exhibit JE-53), p. 56, Annex Table 1.3. For 2018-19, see Notification of 20 December 2018 (English translation), (Exhibit JE-72-B).

⁷⁹ For 2014-15, 2015-16 and 2018-19, the SAP distinguishes between "general" and "early" varieties. For 2016-17 and 2017-18, the SAP refers to, in ascending order of price, "rejected", "normal", and "early" varieties.

⁸⁰ Brazil's first written submission, paras. 137-139 and 156; Australia's first written submission, paras. 153-156; Guatemala's first written submission, paras. 140-144.

⁸¹ Brazil's first written submission, paras. 32-34 and 43 and Figure 5; Australia's first written submission, paras. 29-30 and 55; Guatemala's first written submission, paras. 40 and 54.

order to determine the precise amount of the average FRP applicable in different States, as well as the average SAP in Tamil Nadu, the complainants provide data regarding the average sugarcane recovery rates in different States and seasons.⁸² With respect to the other States that apply SAPs, the complainants assert that it is reasonable and appropriate to rely on the "middle" category of varieties in determining the amount of the AAP.⁸³

3.3. India argues that the FRP and SAPs do not constitute market price support within the meaning of the Agreement on Agriculture because they do not entail any government purchase or procurement of sugarcane.⁸⁴ India does not provide any additional arguments contesting whether the FRP and SAPs constitute AAPs within the meaning of paragraph 8 of Annex 3. India also does not contest the complainants' assertions regarding different recovery rates in India, nor does it take issue with the complainants' calculations of the amount of the AAP in different States in India.⁸⁵

3.4. We have addressed, as a matter of legal interpretation, India's arguments regarding the definition and scope of market price support in paragraphs 7.37 to 7.61 of the Panel Report. We have concluded that the existence of market price support does not require the government to purchase or procure (i.e. through government expenditure or revenue foregone) the relevant agricultural product. With that threshold issue already resolved, we examine here the specific question of whether the FRP and SAPs constitute AAPs within the meaning of paragraph 8 of Annex 3.

3.5. We recall from our discussion of the scope of market price support that the AAP refers to a price for a basic agricultural product that is determined by the administrative action of the government and not by market forces.⁸⁶ Based on our description of the FRP and SAPs above, we understand that the FRP and SAPs constitute mandatory minimum purchase prices for sugarcane, determined by the Central and State Governments respectively, and which sugar producers (i.e. sugar mills and factories processing sugarcane into sugar) are statutorily obligated to pay to sugarcane producers (i.e. sugarcane farmers). In our view, such mandatory minimum purchase prices constitute prices that are independent of market forces, and are set and maintained by administrative action of the Indian Central and State Governments.⁸⁷ We therefore conclude that the FRP and SAPs do indeed constitute AAPs within the meaning of paragraph 8 of Annex 3.

3.6. Turning to the amount of the AAP, we agree with the complainants that, since the amount of the FRP (and one SAP) actually paid to sugarcane farmers varies depending on the sugarcane recovery rate⁸⁸, in order to accurately reflect the amount of the AAP it is necessary to rely on data regarding actual recovery rates in India to calculate the average FRP (and SAP) payable in India. Since the average recovery rate in different States and seasons may differ, and since the SAPs are specific to certain States, the amount of the AAP may be different in different States. We therefore consider it appropriate to assess individual AAPs for different States in India, for each season.

3.7. We proceed with our analysis in four steps: (i) we first review the data and arguments provided by the parties regarding average seasonal recovery rates in different States in India; (ii) taking that data into account, we examine the complainants' assertions regarding the average FRP applicable in different States and seasons (including the extent to which the average recovery rate affects the FRP through the incremental premium); (iii) we assess the complainants' assertions regarding the relevant AAP in the six States that applied an SAP; and (iv) we summarize our findings regarding the amount of the AAP in each State during the 2014-15 to 2018-19 sugar seasons, for purposes of applying the methodology set out in paragraph 8 of Annex 3 of the Agreement on Agriculture.

⁸² See e.g. complainants' response to Panel question No. 65.

⁸³ Complainants' responses to Panel question 70(b).

⁸⁴ See paras. 7.20, 7.30 and 7.38 of the Panel Report.

⁸⁵ India's only comment with respect to the complainants' assertions regarding the SAPs is that the complainants have failed to demonstrate "why the SAPs qualify as an [AAP] under paragraph 8 of Annex 3 in view of paragraphs 1 and 2 of Annex 3". (India's response to Panel question No. 70(c))

⁸⁶ See para. 7.52 of the Panel Report.

⁸⁷ With respect to the SAPs, paragraph 3 of Annex 3 of the Agreement on Agriculture indicates that "[s]upport at both the national and sub-national level shall be included" in the calculation of a Member's AMS.

⁸⁸ We recall that the FRP, and the SAP in Tamil Nadu, stipulate a basic threshold recovery rate, at or below which a minimum price must be paid regardless of how low the actual recovery rate drops. If the sugarcane recovery rate exceeds that threshold rate, the amount of the AAP increases according to the premium rate. (See paras. 2.9 and 2.22 above)

3.2 Recovery rates

3.8. In support of their assertions regarding the average recovery rates in 11 Indian States during the 2014-15 to 2018-19 sugar seasons, the complainants refer to "Price Policy for Sugarcane: 2020-21 Sugar Season", a publication by the Commission for Agricultural Costs and Prices (CACP), which is part of the Indian Government's Ministry of Agriculture and Farmers Welfare.⁸⁹ Regarding the other States, for which these documents provide no data, the complainants rely on the threshold recovery rates set out in the FRP for each sugar season from 2014-15 to 2018-19 as a proxy to represent the recovery rate in these States.⁹⁰

3.9. India does not comment on the complainants' assertions regarding recovery rates.

3.10. We note that the Price Policy for Sugarcane document is published on an annual basis by the Indian Government through the CACP. In our view, these documents constitute a reliable source for us to determine the average seasonal recovery rates in different States in India. We also agree with the complainants that it is appropriate to rely on the most recent publication on the basis that it is likely to contain the most accurate and up-to-date information.⁹¹

3.11. Based on our review of the evidence, we find that the average sugarcane recovery rates during the 2014-15 to 2018-19 sugar seasons, for each of the 11 States for which State-specific data are available, were as follows⁹²:

Recovery rates in individual States (%)					
State	2014-15	2015-16	2016-17	2017-18	2018-19
Andhra Pradesh	9.72	9.31	9.34	9.43	9.33
Bihar	9.10	9.69	9.08	9.54	10.35
Gujarat	10.48	10.37	10.56	10.51	10.65
Haryana	9.89	9.39	10.19	10.46	10.31
Karnataka	10.90	10.59	10.28	10.57	10.25
Maharashtra	11.67	11.19	11.19	11.09	10.07
Punjab	9.37	10.01	9.34	9.74	10.10
Tamil Nadu	8.10	8.47	9.08	8.50	8.90
Telangana	10.47	10.83	10.32	10.84	10.21
Uttar Pradesh	9.49	10.51	10.26	10.73	10.91
Uttarakhand	9.15	9.52	8.20	10.18	10.91

3.12. We note that the data adduced by the complainants is not comprehensive. Other than the 11 individual States identified above, the Price Policy for Sugarcane documents only provide an average recovery rate for "All India"; they do not indicate the average recovery rate for other States in India.⁹³ However, given that the amount of the average FRP applicable in those other States depends on the recovery rate, it is necessary to determine the average recovery rates in these other Indian States in order to accurately calculate India's market price support to sugarcane producers.

3.13. The complainants submit that the most reasonable approach to determining the average recovery rates for these other States is to use, as a proxy, the basic (threshold) rates set out in the

⁸⁹ See complainants' responses to Panel question No. 65 (referring to CACP Price Policy for Sugarcane: 2020-21 Sugar Season, (Exhibit JE-167), p. 81, Annex Table 2.6). The complainants also adduce the CACP Price Policy for Sugarcane publications for the 2018-19 and 2019-20 sugar seasons. The complainants submit, however, that the most recently published edition of the CACP Price Policy for Sugarcane is likely to be the most accurate. (See complainants' responses to Panel question No. 64)

⁹⁰ Complainants' responses to Panel question No. 66.

⁹¹ Complainants' responses to Panel question No. 64.

⁹² See CACP Price Policy for Sugarcane: 2020-21 Sugar Season, (Exhibit JE-167), p. 81, Annex Table 2.6. Our findings correspond to the average recovery rates asserted by the complainants. (See Brazil's Calculation of India's Domestic Support for Sugarcane, (Exhibit BRA-1 (revised-3)), "C1 Recovery" spreadsheet; Australia's Domestic Support Calculations, (Exhibit AUS-1 (revised 23 March 2021)), "RecoveryRates" spreadsheet; Guatemala's Calculations of India's AMS (Exhibit GTM-45 (revised 12 May 2021)), "Recovery" spreadsheet)

⁹³ According to Guatemala, "the sugar recovery rates of all the other States ... are not published". (Guatemala's first written submission, fn 68 to Table 2)

FRP for each sugar season.⁹⁴ The complainants note that the 11 States for which there are data account for the overwhelming majority of sugar production in India, such that it would be inappropriate to use either the "All India" average or an average of these 11 States.⁹⁵

3.14. We agree with the complainants that using either the "All India" recovery rates or a simple average of the 11 States identified above would be inappropriate, in light of the substantial proportion of India's sugar production that is realized in these 11 States.⁹⁶ We note that India has not contested the complainants' reliance on the threshold rates set out in the FRP as a proxy for the recovery rate of the other States. Taking into account that the FRP is determined by the Indian Central Government following consultations with relevant authorities, bodies and associations, and on the basis of multiple relevant factors⁹⁷, we consider it reasonable to use the basic threshold recovery rates set out in the FRP as a proxy to represent the average recovery rate of those other States for which there is no data.

3.15. We therefore use a recovery rate of 9.5% to represent the average recovery rate for "Other States" during the 2014-15 to 2017-18 seasons and 10% to represent the average recovery rate during the 2018-19 season.⁹⁸

3.3 AAP based on the FRP

3.16. For the reasons explained above, we consider that the FRP and SAPs constitute relevant AAPs within the meaning of paragraph 8 of Annex 3 of the Agreement on Agriculture. In order to quantify the AAP, and taking into account that the FRP paid to individual sugarcane producers varies depending on the recovery rates of their sugarcane, we consider it necessary to calculate the average FRP received by sugarcane producers in different States and seasons. In States that did not apply an SAP, the average FRP would represent the AAP, for purposes of applying the paragraph 8 methodology. For States that do apply an SAP, we consider it useful to calculate the average FRP in order to verify whether the amount of the SAP is higher than the amount of the average FRP.⁹⁹

3.17. We therefore proceed to calculate the average FRP applicable in different States in India during each season from 2014-15 to 2018-19, for the purposes of determining the relevant AAP¹⁰⁰:

⁹⁴ See complainants' responses to Panel question No. 66.

⁹⁵ See complainants' responses to Panel question No. 66. According to Brazil's calculations, sugar production in these 11 States accounts for 96.6% of India's total sugar production. (Brazil's response to Panel question No. 66, para. 49) Australia observes that, since the States other than the 11 predominant States "are generally less well-suited to growing cane, it is reasonable to expect those Other States to have lower-than-average recovery rates." (Australia's response to Panel question No. 66, para. 43)

⁹⁶ See para 5.6 below.

⁹⁷ See fn 25 to para. 2.6 above.

⁹⁸ See para. 2.9 above. We recall that the FRP for the 2018-19 sugar season essentially contained two basic recovery rates: 9.5% and 10%. The complainants consider that 10% is an appropriate recovery rate to use as a proxy for "Other States". (See Brazil's Calculation of India's Domestic Support for Sugarcane, (Exhibit BRA-1 (revised-3)), "C1 Recovery" spreadsheet; Australia's Domestic Support Calculations, (Exhibit AUS-1 (revised 23 March 2021)), "RecoveryRates" spreadsheet; Guatemala's Calculations of India's AMS (Exhibit GTM-45 (revised 12 May 2021)), "Recovery" spreadsheet) India has not contested that approach. In light of the structure of the FRP for 2018-19, we agree with the complainants' approach.

⁹⁹ We recall our understanding that sugar producers are obliged to pay whichever minimum price is higher, as between the FRP and the SAP. (See fn 16 to para. 2.3 above)

¹⁰⁰ For the base FRP, FRP basic recovery rate, and premium rate, see para. 2.9 above. For the State recovery rate, see paras. 3.11-3.15 above. The amount of excess, if any, is calculated by subtracting the FRP basic recovery rate from the State recovery rate. The actual premium paid is calculated by multiplying the amount of excess by the premium rate, divided by 0.1 (to account for the fact that the premium is paid on an incremental basis for each 0.1% that the State recovery rate exceeds the FRP basic recovery rate). The AAP (represented by the average FRP) is the sum of the base FRP and the actual premium paid, represented in INR per tonne and rounded to two decimal places (for the sake of precision). We note that our calculations accord with the calculations performed by the complainants. (See Brazil's Calculation of India's Domestic Support for Sugarcane, (Exhibit BRA-1 (revised-3)), "C2-C6 AAPs (FRPs)" spreadsheet; Australia's Domestic Support Calculations, (Exhibit AUS-1 (revised 23 March 2021)), "AAP" spreadsheet; Guatemala's Calculations of India's AMS (Exhibit GTM-45 (revised 12 May 2021)), "AAP (FRP)" spreadsheet)

2014-15 AAP based on the average FRP							
State	Base FRP (INR/100 kg)	State recovery rate (%)	FRP basic recovery rate (%)	Amount of excess (%)	Premium rate (INR/100 kg)	Actual premium paid (INR/100 kg)	AAP (INR/t)
Andhra Pradesh	220	9.72	9.5	0.22	2.32	5.104	2,251.04
Bihar	220	9.10	9.5	-0.4	2.32	0	2,200.00
Gujarat	220	10.48	9.5	0.98	2.32	22.736	2,427.36
Haryana	220	9.89	9.5	0.39	2.32	9.048	2,290.48
Karnataka	220	10.90	9.5	1.4	2.32	32.48	2,524.80
Maharashtra	220	11.67	9.5	2.17	2.32	50.344	2,703.44
Punjab	220	9.37	9.5	-0.13	2.32	0	2,200.00
Tamil Nadu	220	8.10	9.5	-1.4	2.32	0	2,200.00
Telangana	220	10.47	9.5	0.97	2.32	22.504	2,425.04
Uttar Pradesh	220	9.49	9.5	-0.01	2.32	0	2,200.00
Uttarakhand	220	9.15	9.5	-0.35	2.32	0	2,200.00
Other States	220	9.5	9.5	0	2.32	0	2,200.00

2015-16 AAP based on the average FRP							
State	Base FRP (INR/100 kg)	State recovery rate (%)	FRP basic recovery rate (%)	Amount of excess	Premium rate (INR/100 kg)	Actual premium paid (INR/100 kg)	AAP (INR/t)
Andhra Pradesh	230	9.31	9.5	-0.19	2.42	0	2,300.00
Bihar	230	9.69	9.5	0.19	2.42	4.598	2,345.98
Gujarat	230	10.37	9.5	0.87	2.42	21.054	2,510.54
Haryana	230	9.39	9.5	-0.11	2.42	0	2,300.00
Karnataka	230	10.59	9.5	1.09	2.42	26.378	2,563.78
Maharashtra	230	11.19	9.5	1.69	2.42	40.898	2,708.98
Punjab	230	10.01	9.5	0.51	2.42	12.342	2,423.42
Tamil Nadu	230	8.47	9.5	-1.03	2.42	0	2,300.00
Telangana	230	10.83	9.5	1.33	2.42	32.186	2,621.86
Uttar Pradesh	230	10.51	9.5	1.01	2.42	24.442	2,544.42
Uttarakhand	230	9.52	9.5	0.02	2.42	0.484	2,304.84

2015-16 AAP based on the average FRP							
State	Base FRP (INR/100 kg)	State recovery rate (%)	FRP basic recovery rate (%)	Amount of excess	Premium rate (INR/100 kg)	Actual premium paid (INR/100 kg)	AAP (INR/t)
Other States	230	9.5	9.5	0	2.42	0	2,300.00

2016-17 AAP based on the average FRP							
State	Base FRP (INR/100 kg)	State recovery rate (%)	FRP basic recovery rate (%)	Amount of excess	Premium rate (INR/100 kg)	Actual premium paid (INR/100 kg)	AAP (INR/t)
Andhra Pradesh	230	9.34	9.5	-0.16	2.42	0	2,300.00
Bihar	230	9.08	9.5	-0.42	2.42	0	2,300.00
Gujarat	230	10.56	9.5	1.06	2.42	25.652	2,556.52
Haryana	230	10.19	9.5	0.69	2.42	16.698	2,466.98
Karnataka	230	10.28	9.5	0.78	2.42	18.876	2,488.76
Maharashtra	230	11.19	9.5	1.69	2.42	40.898	2,708.98
Punjab	230	9.34	9.5	-0.16	2.42	0	2,300.00
Tamil Nadu	230	9.08	9.5	-0.42	2.42	0	2,300.00
Telangana	230	10.32	9.5	0.82	2.42	19.844	2,498.44
Uttar Pradesh	230	10.26	9.5	0.76	2.42	18.392	2,483.92
Uttarakhand	230	8.20	9.5	-1.3	2.42	0	2,300.00
Other States	230	9.5	9.5	0	2.42	0	2,300.00

2017-18 AAP based on the average FRP							
State	Base FRP (INR/100 kg)	State recovery rate (%)	FRP basic recovery rate (%)	Amount of excess	Premium rate (INR/100 kg)	Actual premium paid (INR/100 kg)	AAP (INR/t)
Andhra Pradesh	255	9.43	9.5	-0.07	2.68	0	2,550.00
Bihar	255	9.54	9.5	0.04	2.68	1.072	2,560.72
Gujarat	255	10.51	9.5	1.01	2.68	27.068	2,820.68
Haryana	255	10.46	9.5	0.96	2.68	25.728	2,807.28
Karnataka	255	10.57	9.5	1.07	2.68	28.676	2,836.76
Maharashtra	255	11.09	9.5	1.59	2.68	42.612	2,976.12
Punjab	255	9.74	9.5	0.24	2.68	6.432	2,614.32

2017-18 AAP based on the average FRP							
State	Base FRP (INR/100 kg)	State recovery rate (%)	FRP basic recovery rate (%)	Amount of excess	Premium rate (INR/100 kg)	Actual premium paid (INR/100 kg)	AAP (INR/t)
Tamil Nadu	255	8.50	9.5	-1	2.68	0	2,550.00
Telangana	255	10.84	9.5	1.34	2.68	35.912	2,909.12
Uttar Pradesh	255	10.73	9.5	1.23	2.68	32.964	2,879.64
Uttarakhand	255	10.18	9.5	0.68	2.68	18.224	2,732.24
Other States	255	9.5	9.5	0	2.68	0	2,550.00

2018-19 AAP based on the average FRP							
State	Base FRP (INR/100 kg)	State recovery rate (%)	FRP basic recovery rate (%)	Amount of excess	Premium rate (INR/100 kg)	Actual premium paid (INR/100 kg)	AAP (INR/t)
Andhra Pradesh	261.25	9.33	9.5	-0.17	±2.75	0	2,612.50
Bihar	275	10.35	10	0.35	±2.75	9.625	2,846.25
Gujarat	275	10.65	10	0.65	±2.75	17.875	2,928.75
Haryana	275	10.31	10	0.31	±2.75	8.525	2,835.25
Karnataka	275	10.25	10	0.25	±2.75	6.875	2,818.75
Maharashtra	275	10.07	10	0.07	±2.75	1.925	2,769.25
Punjab	275	10.10	10	0.1	±2.75	2.75	2,777.50
Tamil Nadu	261.25	8.90	9.5	-0.6	±2.75	0	2,612.50
Telangana	275	10.21	10	0.21	±2.75	5.775	2,807.75
Uttar Pradesh	275	10.91	10	0.91	±2.75	25.025	3,000.25
Uttarakhand	275	10.91	10	0.91	±2.75	25.025	3,000.25
Other States	275	10	10	0	±2.75	0	2,750.00

3.4 AAP based on the SAPs

3.18. The complainants submit that, as a general matter, in States where SAPs are in force, the SAP is higher than the FRP and should be used as the relevant AAP.¹⁰¹ In those States where the SAP distinguishes between different "varieties" of sugarcane, in the absence of specific data regarding the amounts of the different varieties produced in different States, the complainants assert that it is reasonable and appropriate to rely on the "middle" SAP (i.e. the price that is neither the lowest nor the highest) as the relevant AAP.¹⁰²

3.19. India does not contest the complainants' assertions regarding the amounts of the SAPs to be used as AAPs.¹⁰³

3.20. We recall that four States, namely Bihar, Haryana, Punjab, and Uttar Pradesh, set SAPs that distinguished between three varieties of sugarcane for each sugar season from 2014-15 to 2018-19.¹⁰⁴ For these four States, we agree with the complainants that it is reasonable to use the SAP set for the middle category of sugarcane varieties. We consider this appropriate for the following reasons. First, the parties have been unable to adduce data indicating the different quantities of production of different varieties of sugarcane, and, in such circumstances, it is not possible to calculate an appropriate weighted average SAP. Second, given that the SAPs contemplate three different varieties, and that these varieties reflect the maturity period of the sugarcane, it seems reasonable to us that a representative proportion of the relevant sugarcane will fall within the middle category. Third, alternative approaches, such as using a simple average, or the highest or lowest SAP, would, in our view, be a less accurate approach given that the middle SAP was presumably determined by the State Governments in order to reflect a meaningful proportion of production. Finally, India has not presented any reasons to doubt the appropriateness or accuracy of this approach.¹⁰⁵

3.21. We recall that the SAP in Uttarakhand differentiated between two categories of sugarcane varieties for the sugar seasons 2014-15, 2015-16, and 2018-19, and differentiated between three categories of sugarcane varieties for the sugar seasons 2016-17 and 2017-18.¹⁰⁶ For the latter two seasons, we consider it appropriate to use the middle category as the relevant AAP, for the reasons explained above.¹⁰⁷ We note that, during these seasons, the relevant middle category was "normal" varieties. We further note that, during these two seasons, "normal" varieties were distinguished from "rejected" and "early" varieties. For the three sugar seasons for which the SAP only distinguished between two categories, we note that the categories were "general" and "early". We also observe that the SAPs for all seasons identified "early" varieties as a specific category of varieties. Since "early" varieties were separately identified in all five sugar seasons, we understand that the "general" varieties category captures both the "normal" and the "rejected" varieties of sugarcane. We also consider that, based on its plain meaning, the category of "general" varieties is likely to have been applicable to a greater proportion of sugarcane than the category of "early" varieties of sugarcane. We therefore consider it appropriate, in quantifying the AAP in Uttarakhand during the 2014-15, 2015-16, and 2018-19 sugar seasons, to rely on the "general" varieties price.

3.22. Finally, we recall that Tamil Nadu, during the 2014-15 to 2017-18 sugar seasons, applied an SAP that was similar in structure to the FRP, in that the amount of the SAP depended on the sugarcane recovery rate. We note, however, that under the Tamil Nadu SAP for each sugar season, the premium rate was only payable if the recovery rate exceeded 9.5%.¹⁰⁸ We have found that the average recovery rate in Tamil Nadu did not exceed 9.5% in any season from 2014-15 to 2017-18.¹⁰⁹

¹⁰¹ Brazil's first written submission, para. 35; Australia's first written submission, para. 41; Guatemala's first written submission, para. 72.

¹⁰² Complainants' responses to Panel question No. 70(b).

¹⁰³ See para. 3.3 above.

¹⁰⁴ See paras. 2.12, 2.16, 2.19, and 2.25 above.

¹⁰⁵ As a consequence of our decision to rely on the middle category of varieties, we note that it is not necessary for us to resolve ambiguities or lack of clarity in the evidence regarding the least and most expensive varieties. (See in particular fn 55 to para. 2.16 above)

¹⁰⁶ See para. 2.27 above.

¹⁰⁷ See para. 3.20 above.

¹⁰⁸ See para. 2.22 above.

¹⁰⁹ See para. 3.11 above.

Consequently, the appropriate AAP in Tamil Nadu is, in our view, equivalent to the basic price identified in the SAP, without needing to take into account the premium rate.

3.23. Based on the foregoing, we consider that the relevant AAPs based on the SAPs are as follows¹¹⁰:

AAP based on the SAPs (INR/t)					
State	2014-15	2015-16	2016-17	2017-18	2018-19
Bihar	2,600.00	2,600.00	2,800.00	2,800.00	2,900.00
Haryana	3,050.00	3,050.00	3,150.00	3,250.00	3,350.00
Punjab	2,850.00	2,850.00	2,900.00	3,000.00	3,000.00
Tamil Nadu	2,650.00	2,850.00	2,850.00	2,850.00	N/A
Uttar Pradesh	2,800.00	2,800.00	3,050.00	3,150.00	3,150.00
Uttarakhand	2,800.00	2,800.00	3,070.00	3,160.00	3,170.00

3.5 Summary

3.24. We note that, for all States that apply an SAP, the AAP based on the SAP is always higher than the AAP based on the FRP.¹¹¹ We recall that, in States where an SAP is applied, sugar producers are required to pay whichever is the higher price as between the FRP and SAPs.¹¹² Accordingly, in applying the methodology contained in paragraph 8 of Annex 3 of the Agreement on Agriculture, we consider that, for those States that apply an SAP, the AAP must be based on the SAP. For all other States and seasons, the average FRP constitutes the relevant AAP.

3.25. To summarize, for the purposes of applying the methodology set out in paragraph 8 of Annex 3, we consider it appropriate to rely on the following AAPs¹¹³:

AAP (INR/t)					
State	2014-15	2015-16	2016-17	2017-18	2018-19
Andhra Pradesh	2,251.04	2,300.00	2,300.00	2,550.00	2,612.50
Bihar	2,600.00	2,600.00	2,800.00	2,800.00	2,900.00
Gujarat	2,427.36	2,510.54	2,556.52	2,820.68	2,928.75
Haryana	3,050.00	3,050.00	3,150.00	3,250.00	3,350.00
Karnataka	2,524.80	2,563.78	2,488.76	2,836.76	2,818.75
Maharashtra	2,703.44	2,708.98	2,708.98	2,976.12	2,769.25
Punjab	2,850.00	2,850.00	2,900.00	3,000.00	3,000.00
Tamil Nadu	2,650.00	2,850.00	2,850.00	2,850.00	2,612.50
Telangana	2,425.04	2,621.86	2,498.44	2,909.12	2,807.75
Uttar Pradesh	2,800.00	2,800.00	3,050.00	3,150.00	3,150.00
Uttarakhand	2,800.00	2,800.00	3,070.00	3,160.00	3,170.00
Other States	2,200.00	2,300.00	2,300.00	2,550.00	2,750.00

4 FIXED EXTERNAL REFERENCE PRICE

4.1. Paragraph 8 of Annex 3 of the Agreement on Agriculture indicates that one component of the calculation of market price support is the "fixed external reference price" (FERP). Paragraph 9 of Annex 3 elaborates that the FERP is "based on the years 1986 to 1988 and shall generally be the average f.o.b. unit value for the basic agricultural product concerned in a net exporting country and the average c.i.f. unit value for the basic agricultural product concerned in a net importing country

¹¹⁰ See paras. 2.12, 2.16, 2.19, 2.22, 2.25, 2.27, 3.20, and 3.22 above. We convert INR per 100 kilogrammes to INR per tonnes, to accord with our calculations of the AAP based on the FRP.

¹¹¹ Compare paras. 3.17 and 3.23 above.

¹¹² See para. 2.3 above.

¹¹³ See paras. 3.17 and 3.23 above. We note that the complainants use these same AAPs in applying the methodology set out in paragraph 8 of Annex 3 of the Agreement on Agriculture. (See Brazil's Calculation of India's Domestic Support for Sugarcane, (Exhibit BRA-1 (revised-3)), "C14-C20 AAPs (FRP+SAP)" spreadsheet; Australia's Domestic Support Calculations, (Exhibit AUS-1 (revised 23 March 2021)), "AAP" spreadsheet; Guatemala's Calculations of India's AMS (Exhibit GTM-45 (revised 12 May 2021)), "AAP (FRP & SAP)" spreadsheet)

in the base period." Additionally, under paragraph 9, the FERP "may be adjusted for quality differences as necessary".

4.2. The complainants note that India's Supporting Tables, contained in document G/AG/AGST/IND and identified in India's Schedule, indicate an FERP of INR 156.16 per tonnes.¹¹⁴ The complainants observe that the FERP in India's Supporting Tables was calculated based on a recovery rate of 8.5%.¹¹⁵ Noting that recovery rates in India today are higher than 8.5% the complainants consider that, in accordance with paragraph 9 of Annex 3, the FERP should be adjusted for "quality differences" in order to reflect the different recovery rates in different States today.¹¹⁶ By replacing the recovery rate of 8.5% (used in India's Supporting Tables) with updated average recovery rates for different States and seasons, the complainants calculate adjusted FERPs for different States for each season from 2014-15 to 2018-19.¹¹⁷

4.3. India does not comment on the complainants' assertions regarding the FERP, nor does India object to the complainants' calculation of adjusted FERPs on a State-specific and seasonal basis.

4.4. In light of Article 1 of the Agreement on Agriculture¹¹⁸, we consider it appropriate to take into account the FERP set out in India's Supporting Tables, identified in India's Schedule¹¹⁹, to determine the amount of market price support provided to sugarcane producers for the 2014-15 to 2018-19 sugar seasons. We note, in this respect, that Supporting Table A of India's Schedule indicates an FERP for sugarcane of INR 156.16 per tonne.¹²⁰

4.5. We also observe that Supporting Table A sets out the "Calculation Details for estimating AMS for Sugarcane". The methodology for calculating the FERP identified in India's Schedule entailed, *inter alia*, dividing a "Computed International price of Sugar in terms of Sugarcane"¹²¹ by 11.76 to determine the "Estimated External reference price of Sugarcane at 8.5% recovery". A clarifying note indicates that "[t]he computed international price[] of sugar, less conversion costs, is converted to sugarcane using a recovery rate of 8.5% for comparison with [the] domestic support price of sugarcane".¹²² This calculation was performed for all three sugar seasons from 1986-87 to 1988-1989, as well as the average rate over those three seasons. The average "Estimated External reference price of Sugarcane at 8.5% recovery" is indicated as INR 156.16.¹²³

4.6. It is uncontested by the parties that the "recovery rate" referred to in India's Supporting Table A is a reference to the proportion of sugar that can be recovered from sugarcane. In our view, a difference in the recovery rates of different sugarcane is indeed a relevant "quality difference" within the meaning of paragraph 9 of Annex 3. Consequently, we agree with the complainants that, pursuant to paragraph 9 of Annex 3, it is appropriate to adjust the FERP on the basis of any

¹¹⁴ Brazil's first written submission, para. 103; Australia's first written submission, paras. 158-160; Guatemala's first written submission, paras. 145 and 147. (referring to G/AG/AGST/IND, p. 28, column 4)

¹¹⁵ Brazil's first written submission, para. 104; Australia's first written submission, para. 160; Guatemala's first written submission, paras. 145 and 147.

¹¹⁶ Brazil's first written submission, paras. 146-147; Australia's first written submission, paras. 161-162; Guatemala's first written submission, paras. 146-147.

¹¹⁷ Brazil's first written submission, para. 148; Brazil's Calculation of India's Domestic Support for Sugarcane, (Exhibit BRA-1 (revised-3)), "FERP" spreadsheet; Australia's first written submission, para. 162; Australia's Domestic Support Calculations, (Exhibit AUS-1 (revised 23 March 2021)), "FERP" spreadsheet; Guatemala's first written submission, para. 147; Guatemala's Calculations of India's AMS (Exhibit GTM-45 (revised 12 May 2021)), "FERP details" spreadsheet.

¹¹⁸ Pursuant to Article 1(a)(ii) of the Agreement on Agriculture, a Member's AMS during and after the implementation period is to be "calculated in accordance with the provisions of Annex 3 of this Agreement and taking into account the constituent data and methodology used in the tables of supporting material incorporated by reference in Part IV of the Member's Schedule". Similarly, Article 1(h)(ii) of the Agreement on Agriculture indicates that the calculation of a Member's Total AMS, for any year during or after the implementation period, is to be "in accordance with the provisions of this Agreement, including Article 6, and with the constituent data and methodology used in the tables of supporting material incorporated by reference in Part IV of the Member's Schedule".

¹¹⁹ Part IV, Section I of India's Schedule states, under the heading "Relevant Supporting Tables and document reference": "AGST/IND: Supporting Tables refer."

¹²⁰ G/AG/AGST/IND, p. 28.

¹²¹ The "Computed International price of Sugar in terms of Sugarcane" was calculated for each season from 1986-87 to 1988-89, by subtracting the "most efficient conversion cost of Sugar from Sugarcane" from the "International Price of Sugar". (G/AG/AGST/IND, p. 29)

¹²² G/AG/AGST/IND, note 3 on p. 29.

¹²³ G/AG/AGST/IND, p. 29.

differences in recovery rates from the 8.5% rate used to calculate the FERP in India's Supporting Table A. We also agree with the complainants that, in light of Article 1 of the Agreement on Agriculture, any such adjustment should adhere as closely as possible to the methodology set out in India's Supporting Table A. Finally, since recovery rates may differ across different States in India, as well as over different seasons, we also agree with the complainants that an adjusted FERP should be calculated for different States and seasons.¹²⁴

4.7. We recall our findings regarding the relevant recovery rates in different States in India during the sugar seasons 2014-15 to 2018-19.¹²⁵ We also note that India's Supporting Table A indicates the average Computed International Price of Sugar for the three sugar seasons from 1986-87 to 1988-89 as INR 1836.38 per tonne.¹²⁶ In our view, it is consistent with the methodology set out in India's Supporting Table A for us to calculate adjusted FERPs for different States by multiplying the average Computed International Price of Sugar indicated in India's Supporting Table A (i.e. INR 1836.38) by the average recovery rate in those States.¹²⁷

4.8. We therefore calculate the relevant FERPs for different States and seasons as follows¹²⁸:

FERP											
		2014-15		2015-16		2016-17		2017-18		2018-19	
State	Comp. int. price of sugar (INR/tonne)	Rec. Rate (%)	FERP (INR/tonne)								
Andhra Pradesh	1836.38	9.72	178.50	9.31	170.97	9.34	171.52	9.43	173.17	9.33	171.33
Bihar	1836.38	9.10	167.11	9.69	177.95	9.08	166.74	9.54	175.19	10.35	190.07
Gujarat	1836.38	10.48	192.45	10.37	190.43	10.56	193.92	10.51	193	10.65	195.57
Haryana	1836.38	9.89	181.62	9.39	172.44	10.19	187.13	10.46	192.09	10.31	189.33
Karnataka	1836.38	10.90	200.17	10.59	194.47	10.28	188.78	10.57	194.11	10.25	188.23
Maharashtra	1836.38	11.67	214.31	11.19	205.49	11.19	205.49	11.09	203.65	10.07	184.92
Punjab	1836.38	9.37	172.07	10.01	183.82	9.34	171.52	9.74	178.86	10.10	185.47
Tamil Nadu	1836.38	8.10	148.75	8.47	155.54	9.08	166.74	8.50	156.09	8.90	163.44
Telangana	1836.38	10.47	192.27	10.83	198.88	10.32	189.51	10.84	199.06	10.21	187.49
Uttar Pradesh	1836.38	9.49	174.27	10.51	193.00	10.26	188.41	10.73	197.04	10.91	200.35
Uttarakhand	1836.38	9.15	168.03	9.52	174.82	8.20	150.58	10.18	186.94	10.91	200.35
Other States	1836.38	9.50	174.46	9.50	174.46	9.50	174.46	9.50	174.46	10	183.64

¹²⁴ We also consider that this is a useful and relevant approach to take in light of the data adduced by the complainants, which provides recovery rates for different States, as well as the fact that the AAP in India varies across different States and seasons. (See para. 3.6 above)

¹²⁵ See paras. 3.11 and 3.15 above.

¹²⁶ G/AG/AGST/IND, p. 29.

¹²⁷ We are aware that the Fixed External Reference Price for sugarcane indicated in Supporting Table A of India's Schedule was calculated by dividing the Computed International Price for Sugar by 11.76, rather than multiplying by 0.085. The complainants submit that this difference is not relevant to the determination of an adjusted FERP in these disputes. Brazil also states that, in its view, dividing by 11.76 was reasonable, given that "the price of 1 kg of sugar would equal the price of approximately 11.76 kg of sugarcane, ... rounded to two decimal places". India, for its part, submits that "dividing a figure by 11.76 is indeed equal to calculating 8.5 per cent of that figure". (See parties' responses to Panel question No. 62(b)) For our purposes, we note that Supporting Table A clearly indicates that this calculation was intended to "convert" an international reference price for *sugar* into a reference price for *sugarcane*, using the average recovery rate in India of 8.5%. (G/AG/AGST/IND, note 3 on p. 29)

¹²⁸ For the computed international price of sugar, see India's Schedule, Supporting Table A (G/AG/AGST/IND, p. 29). Our findings regarding relevant recovery rates are set out at paras. 3.11 and 3.15 above. The FERPs for different States and seasons are determined by calculating the decimal equivalent of the recovery rate (i.e. dividing by 100) and multiplying the result by the computed international price of sugar. We note that India's Schedule identifies an FERP accurate to two decimal places. (See G/AG/AGST/IND, p. 29) In applying the paragraph 8 methodology, the complainants, however, rely on precise FERP figures. (See Brazil's Calculation of India's Domestic Support for Sugarcane, (Exhibit BRA-1 (revised-3)), "FERP" spreadsheet; Australia's Domestic Support Calculations, (Exhibit AUS-1 (revised 23 March 2021)), "FERP" spreadsheet; Guatemala's Calculations of India's AMS (Exhibit GTM-45 (revised 12 May 2021)), "FERP details" spreadsheet) We recall that Article 1(a)(ii) of the Agreement on Agriculture indicates that AMS should be calculated "taking into account the constituent data and methodology used in the tables of supporting material incorporated" in Members' Schedules. For our purposes, we consider it appropriate to rely on an FERP that is accurate to two decimal places, in accordance with the constituent data and methodology contained in India's Schedule.

5 QUANTITY OF ELIGIBLE PRODUCTION

5.1. Paragraph 8 of Annex 3 of the Agreement on Agriculture indicates that one of the components in the calculation of market price support is the "quantity of production eligible to receive the applied administered price". We refer to this as the "quantity of eligible production" (QEP).

5.2. The complainants note that paragraph 8 of Annex 3 refers to the quantity of production "eligible" to receive the AAP and not the quantity of production that "actually" receives the AAP.¹²⁹ The complainants argue that all sugarcane produced in India is eligible to receive the FRP.¹³⁰ The complainants also assert that, in States where an SAP applies, all sugarcane produced in that State is eligible for the SAP.¹³¹ Since there is no limitation in India's legal framework on the quantity of sugarcane that is required to be purchased at the AAP, the complainants submit that all production of sugarcane is eligible to be purchased at the AAP.¹³² The complainants provide data regarding the quantity of sugarcane production in India on a State-specific and seasonal basis.¹³³

5.3. India does not contest the complainants' assertions regarding the QEP.

5.4. We recall that paragraph 8 of Annex 3 refers to the "quantity of production *eligible* to receive the applied administered price".¹³⁴ In our view, this shows that the QEP signifies the amount of production that is eligible to receive the AAP, and not the amount of production that actually received the AAP. We note that our approach finds support in findings made in past disputes on the same issue.¹³⁵ We further note that India does not contest this understanding of the QEP.

5.5. In our view, the evidence adduced by the parties regarding the content and operation of the FRP and SAPs confirms the complainants' assertion that there is no limitation on the quantity of sugarcane that is eligible to be purchased at the AAP in India.¹³⁶ We therefore turn to determine, based on the evidence adduced by the complainants, the total quantity of sugarcane production in relevant States for each sugar season from 2014-15 to 2018-19.

5.6. Based on our review of the evidence, we find that the relevant QEPs for different States and seasons were as follows¹³⁷:

¹²⁹ Brazil's first written submission, para. 109; Australia's first written submission, paras. 124-130; Guatemala's first written submission, paras. 123-126.

¹³⁰ Brazil's first written submission, paras. 150-152; Australia's first written submission, para. 164; Guatemala's first written submission, paras. 150-152.

¹³¹ Brazil's first written submission, paras. 156 and 159; Australia's first written submission, para. 164; Guatemala's first written submission, para. 152.

¹³² Brazil's first written submission, paras. 150-152; Australia's first written submission, paras. 164-165; Guatemala's first written submission, paras. 150-152.

¹³³ For the seasons from 2014-15 to 2016-17, the complainants refer to Directorate of Sugarcane Development, Sugarcane in India: State wise Production (Exhibit JE-140). For the 2017-18 and 2018-19 seasons, the complainants refer to Department of Agriculture & Farmers Welfare: 1st advance estimates for 2019-20, (Exhibit JE-141). (Brazil's first written submission, fn 376 to Table C-8; Australia's Domestic Support Calculations, (Exhibit AUS-1 (revised 23 March 2021)), "Production" spreadsheet; Guatemala's response to Panel question No. 72; Guatemala's Calculations of India's AMS (Exhibit GTM-45 (revised 12 May 2021)), "QEP" spreadsheet) (Australia also refers to First Advance Estimates of Production of Foodgrains for 2019-20, Ministry of Agriculture and Farmers Welfare, 23 September 2019 (Exhibit AUS-49) (Australia's first written submission, fn 575 to Table 17))

¹³⁴ Emphasis added.

¹³⁵ See Panel Reports, *Korea – Various Measures on Beef*, para. 831; *China – Agricultural Producers*, para. 7.296; and Appellate Body Report, *Korea – Various Measures on Beef*, para. 120.

¹³⁶ See sections 2.1 and 2.2 above.

¹³⁷ For the sugar seasons 2014-15 to 2016-17, see Directorate of Sugarcane Development, Sugarcane in India: State wise Production (Exhibit JE-140). For the 2017-18 and 2018-19 sugar seasons, see Department of Agriculture & Farmers Welfare: 1st advance estimates for 2019-20, (Exhibit JE-141). Where there are discrepancies between Exhibits JE-140 and JE-141, for instance with respect to the data for the 2017-18 sugar season, we have relied on the most recent data (i.e. Exhibit JE-141) on the basis that the most up-to-date statistics are likely to be more accurate. (See parties' responses to Panel question No. 64) We also note that the data in Exhibit JE-140 is indicated in "lakh tonnes". We understand from the complainants that one *lakh* refers to one hundred thousand (i.e. 100,000). (Brazil's first written submission, fn 3 to Table 1; Australia's first written submission, p. 27; Guatemala's first written submission, p. v) India does not contest this understanding. We further note that the residual "other" States entries in Exhibits JE-140 and JE-141 refer to States different from

QEP (thousands of tonnes)					
State	2014-15	2015-16	2016-17	2017-18	2018-19
Andhra Pradesh	9,987	9,353	7,830	7,789.6	8,091.2
Bihar	14,034	12,649	13,036	13,824.6	11,660.9
Gujarat	14,330	11,120	11,950	12,072.1	12,036.4
Haryana	7,169	6,692	8,223	9,632.9	7,570.6
Karnataka	43,776	37,834	27,378	31,135.2	42,006.3
Maharashtra	84,699	73,680	52,262	82,984.0	92,442.6
Punjab	7,039	6,607	7,152	8,023.7	7,773.7
Tamil Nadu	28,093	25,494	18,988	17,154	16,207.6
Telangana	3,343	2,405	2,061	2,604.5	2,800
Uttar Pradesh	133,061	145,385	140,169	177,033.3	179,714.8
Uttarakhand	6,165	5,886	6,477	6,271.4	6,329.3
Other States	10,634	11,343	10,544	11,379.6	13,523.4

6 CALCULATION OF MARKET PRICE SUPPORT

6.1. Having determined the individual components of the methodology set out in paragraph 8 of Annex 3 of the Agreement on Agriculture, we proceed to apply that methodology to calculate the amount of market price support provided to sugarcane producers in different States and seasons. We also sum up these State totals to determine the total market price support provided to all sugarcane producers in India during each season.

6.2. For the reasons set out in this Appendix, we conclude that India provided market price support to sugarcane producers, during each sugar season from 2014-15 to 2018-19, as follows¹³⁸:

Market price support (2014-15 sugar season)				
State	FERP (INR per tonne)	AAP (INR per tonne)	QEP (thousands m/t)	MPS (millions INR)
Andhra Pradesh	178.50	2,251.04	9,987	20,698.46
Bihar	167.11	2,600.00	14,034	34,143.18
Gujarat	192.45	2,427.36	14,330	32,026.26
Haryana	181.62	3,050.00	7,169	20,563.42
Karnataka	200.17	2,524.80	43,776	101,763.00
Maharashtra	214.31	2,703.44	84,699	210,826.82
Punjab	172.07	2,850.00	7,039	18,849.95
Tamil Nadu	148.75	2,650.00	28,093	70,267.62
Telangana	192.27	2,425.04	3,343	7,464.15
Uttar Pradesh	174.27	2,800.00	133,061	349,382.26
Uttarakhand	168.03	2,800.00	6,165	16,226.10
Other States	174.46	2,200.00	10,634	21,539.59
Total – All India				903,750.80

the "Other States" for which we require data. We therefore calculate the relevant figures for our purposes by subtracting the sum of production for the relevant individual States from the "Grand Total"/"All-India" figures indicated in Exhibits JE-140 and JE-141. In this respect, we observe that the figures indicated in Exhibits JE-140 and JE-141 regarding the "Grand Total"/"All-India" sugar production are further substantiated by First Advance Estimates of Production of Foodgrains for 2019-20, 23 September 2019, (Exhibit AUS-49). Finally, we note that our determination of the relevant QEP figures corresponds to the figures identified by the complainants. (See Brazil's Calculation of India's Domestic Support for Sugarcane, (Exhibit BRA-1 (revised-3)), "C8 Production" spreadsheet; Australia's Domestic Support Calculations, (Exhibit AUS-1 (revised 23 March 2021)), "Production" spreadsheet; Guatemala's Calculations of India's AMS (Exhibit GTM-45 (revised 12 May 2021)), "QEP" spreadsheet)

¹³⁸ See paras. 3.25, 4.8, and 5.6 above. We calculate market price support (i.e. MPS) by multiplying the difference between the FERP and the AAP by the QEP, in accordance with paragraph 8 of Annex 3 of the Agreement on Agriculture, and dividing the result by 1,000 to yield a figure representing millions of INR, rounded to two decimal places. The amount of market price support for "Total – All India" is calculated by summing the various amounts of market price support provided in each State during each season. We recognize that the results of our calculations differ marginally from the results of the complainants' calculations. We understand that these differences result from our reliance on an FERP rounded to two decimal figures, in accordance with the FERP set forth in India's Schedule, rather than the precise FERP figures relied upon by the complainants. (See fn 128 to para. 4.8 above)

Market price support (2015-16 sugar season)				
State	FERP (INR per tonne)	AAP (INR per tonne)	QEP (thousands m/t)	MPS (millions INR)
Andhra Pradesh	170.97	2,300.00	9,353	19,912.82
Bihar	177.95	2,600.00	12,649	30,636.51
Gujarat	190.43	2,510.54	11,120	25,799.62
Haryana	172.44	3,050.00	6,692	19,256.63
Karnataka	194.47	2,563.78	37,834	89,640.47
Maharashtra	205.49	2,708.98	73,680	184,457.14
Punjab	183.82	2,850.00	6,607	17,615.45
Tamil Nadu	155.54	2,850.00	25,494	68,692.56
Telangana	198.88	2,621.86	2,405	5,827.27
Uttar Pradesh	193.00	2,800.00	145,385	379,018.70
Uttarakhand	174.82	2,800.00	5,886	15,451.81
Other States	174.46	2,300.00	11,343	24,110.00
Total – All India				880,418.99

Market price support (2016-17 sugar season)				
State	FERP (INR per tonne)	AAP (INR per tonne)	QEP (thousands m/t)	MPS (millions INR)
Andhra Pradesh	171.52	2,300.00	7,830	16,666.00
Bihar	166.74	2,800.00	13,036	34,327.18
Gujarat	193.92	2,556.52	11,950	28,233.07
Haryana	187.13	3,150.00	8,223	24,363.68
Karnataka	188.78	2,488.76	27,378	62,968.85
Maharashtra	205.49	2,708.98	52,262	130,837.39
Punjab	171.52	2,900.00	7,152	19,514.09
Tamil Nadu	166.74	2,850.00	18,988	50,949.74
Telangana	189.51	2,498.44	2,061	4,758.70
Uttar Pradesh	188.41	3,050.00	140,169	401,106.21
Uttarakhand	150.58	3,070.00	6,477	18,909.08
Other States	174.46	2,300.00	10,544	22,411.69
Total – All India				815,045.69

Market price support (2017-18 sugar season)				
State	FERP (INR per tonne)	AAP (INR per tonne)	QEP (thousands m/t)	MPS (millions INR)
Andhra Pradesh	173.17	2,550.00	7,789.6	18,514.55
Bihar	175.19	2,800.00	13,824.6	36,286.95
Gujarat	193	2,820.68	12,072.1	31,721.62
Haryana	192.09	3,250.00	9,632.9	29,456.54
Karnataka	194.11	2,836.76	31,135.2	82,279.44
Maharashtra	203.65	2,976.12	82,984.0	230,070.65
Punjab	178.86	3,000.00	8,023.7	22,635.98
Tamil Nadu	156.09	2,850.00	17,154	46,211.33
Telangana	199.06	2,909.12	2,604.5	7,058.35
Uttar Pradesh	197.04	3,150.00	177,033.3	522,772.25
Uttarakhand	186.94	3,160.00	6,271.4	18,645.25
Other States	174.46	2,550.00	11,379.6	27,032.69
Total – All India				1,072,685.61

Market price support (2018-19 sugar season)				
State	FERP (INR per tonne)	AAP (INR per tonne)	QEP (thousands m/t)	MPS (millions INR)
Andhra Pradesh	171.33	2,612.50	8,091.2	19,751.99
Bihar	190.07	2,900.00	11,660.9	31,600.22
Gujarat	195.57	2,928.75	12,036.4	32,897.65
Haryana	189.33	3,350.00	7,570.6	23,928.17
Karnataka	188.23	2,818.75	42,006.3	110,498.41
Maharashtra	184.92	2,769.25	92,442.6	238,902.18
Punjab	185.47	3,000.00	7,773.7	21,879.31
Tamil Nadu	163.44	2,612.50	16,207.6	39,693.38

Market price support (2018-19 sugar season)				
State	FERP (INR per tonne)	AAP (INR per tonne)	QEP (thousands m/t)	MPS (millions INR)
Telangana	187.49	2,807.75	2,800	7,336.73
Uttar Pradesh	200.35	3,150.00	179,714.8	530,095.76
Uttarakhand	200.35	3,170.00	6,329.3	18,795.81
Other States	183.64	2,750.00	13,523.4	34,705.91
Total – All India				1,110,085.53
