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**ANALYSIS OF TRENDS IN GREEN BOX SUPPORT**

SUBMISSION BY THE CAIRNS GROUP

*Revision*

The following submission, dated 20 December 2023, is being circulated at the request of the Cairns Group.<sup>1</sup>

**1 INTRODUCTION AND PURPOSE**

1.1. This paper investigates the long-term trends in domestic support provided under Annex 2 of the Agreement on Agriculture (the Green Box) between 2000 and 2019. It captures how Green Box use has changed over time, how support is distributed across different categories, and which WTO Members notify support under this provision. It is based on data provided in DS:1 notifications of WTO Members. This paper aims to help improve WTO Members' understanding of the use of the Green Box, and to inform related discussions in both the Committee on Agriculture and the Committee on Agriculture in Special Session.

**2 KEY FINDINGS**

*Green Box support is equal to three times that of all other types of domestic support combined.*

2.1. In 2019, Green Box support accounted for 75.6% of total domestic support notified to the WTO. In comparison, Current Total Aggregate Measure of Support (CTAMS) accounted for 11.0%, *de minimis* 6.6%, Article 6.2 support 4.9% and Blue Box (Article 6.5) support 1.9% (Figure 1).

*Green Box support more than doubled from 2000-2019, outpacing growth in any other domestic support category.*

2.2. From 2000 to 2019, total Green Box support (as measured in 2019 US dollars) increased by 117% (from USD 213 billion to USD 461 billion), in comparison to an increase in support through *de minimis* support of 49.9% (from USD 26.7 billion to USD 40.0 billion) and under Article 6.2 of 2.8% (USD 29.2 billion to USD 30.0 billion). There was a decrease of CTAMS of 38.6% (from USD 110 billion to USD 67.3 billion) and Blue Box support of 63.1% (from USD 31.8 billion to USD 11.7 billion) (Figure 2).<sup>2</sup>

*Over 90% of Green Box support is provided by five Members.*

2.3. In 2019, China provided the largest amount of Green Box support, accounting for 38.3% of total Green Box support (USD 177 billion), followed by the United States (US) (30.0%, USD 138 billion), the European Union (EU) (16.6%, USD 76.7 billion)<sup>3</sup>, India (6.6%, USD 30.3 billion) and

<sup>1</sup> Indonesia, Pakistan and South Africa are still consulting.

<sup>2</sup> At the time of publication, 60 Members had submitted domestic support notifications for 2019, while 74 Members had submitted domestic support notifications for 2000.

<sup>3</sup> The United Kingdom is included as part of the EU in this paper.

Japan (3.9%, USD 18.2 billion) (Figure 1). Together these five Members accounted for 95.5% of total Green Box support.<sup>4</sup>

*Support for over half of the Green Box support categories is dominated by either one or two Members.*

2.4. The types of measures supported by different WTO Members under Annex 2 varies significantly. Over half of Green Box support categories, however, are dominated by one or two of the five Members noted in paragraph 2.3 above (Figure 5).

*Four of the top five providers of Green Box support focus spending on a single category of support.*

2.5. Four of the top five providers of Green Box support provide a significantly larger amount of support for one specific category, rather than allocating support more equally across different categories. In comparison, China allocates support more equally across several different categories.

*Domestic support notifications.*

2.6. A significant number of errors were picked up in the WTO's Agriculture Information Management System (AgIMS) database: some of the values that were extracted from AgIMS were different to the values reported in Members' DS:1 notifications; for some Members, different currencies were recorded in AgIMS to those reported in the DS:1 notifications or different units of currency were recorded in AgIMS to those used in DS:1 notifications; in some cases, amendments made by revisions, addenda or corrigenda have not been reflected in AgIMS. Since the original drafting of this paper the database has been reformed to now contain domestic support data both in the originally notified currencies as well as in equivalent USD to facilitate comparison.

### 3 DEFINITIONS

3.1. The term "Green Box" support refers to domestic support measures listed under Annex 2 of the Agreement on Agriculture (AoA), which are exempt from reduction commitments. These measures are required to meet the requirement that they have no, or at most minimal, trade-distorting effects or effects on production. Accordingly, all Green Box measures for which exemptions are claimed are required to conform to the following basic criteria:

- a. the support in question shall be provided through a publicly funded government programme (including government revenue foregone) not involving transfers from consumers and,
- b. the support in question shall not have the effect of providing price support to producers.

3.2. Annex 2 identifies a range of additional policy-specific criteria for four broad categories of Green Box support – general services, public stockholding for food security purposes (PSH), domestic food aid and direct payments to producers.

3.3. The general services category is further divided into seven sub-categories under paragraph 2 of Annex 2: research, pest and disease control, training services, extension and advisory services, inspection services, marketing and promotion services and infrastructural services.

3.4. General services that do not fit into a clearly defined category according to Annex 2, paragraphs 2(a) through (g) or have components of more than one category, for example research and extension and advisory services, are categorized as "other general services".

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<sup>4</sup> This is an approximate figure that does not take into account a number of large Green Box providers that have not provided domestic support notifications for 2019.

3.5. There are eight categories of direct payments: decoupled income support, income insurance and income safety-net programmes, payments for relief from natural disasters, structural adjustment assistance provided through producer retirement programmes, structural adjustment assistance provided through resource retirement programmes, structural adjustment assistance provided through investment aids, environmental programmes and regional assistance programmes.

3.6. Direct payments that do not fit into a clearly defined category in Annex 2, paragraphs 6 through 13 of the AoA but conform to the criteria in Annex 2, paragraph 1 and paragraph 6(b) through (e), are categorized as "other direct payments".

#### 4 METHODOLOGY

4.1. The analysis presented in this paper uses the data contained in Members' domestic support notifications (DS:1 notifications) from 2000 to 2019. This data was sourced from AGIMS and the WTO's *Documents Online*, as at 1 October 2023.

4.2. All values have been converted to 2019 US dollars through a two-stage approach: (i) they have been deflated to 2019 values in the national currency of the reporting Member using deflators provided by the International Monetary Fund, unless otherwise noted<sup>5</sup>; (ii) they were subsequently converted to US dollars.<sup>6</sup>

4.3. A series of 2019 snapshots are used to compare relative amounts of Green Box support provided by Members in that year. The year 2019 was selected because it is the most recent year available for which a significant majority of the largest Green Box providers have provided DS:1 notifications. As of 1 October 2023, 60 countries had provided DS:1 notifications for 2019, representing 85.6% of global agricultural output<sup>7</sup>, compared with 48 for 2020, 33 for 2021 and 14 for 2022.<sup>8,9</sup>

#### 5 COMPARISON OF GREEN BOX SUPPORT WITH OTHER TYPES OF DOMESTIC SUPPORT

5.1. In 2019, total notified domestic support equated to USD 610 billion. Green Box support accounted for the largest share (75.6%), followed by CTAMS (11.0%), *de minimis* (6.6%), Article 6.2 support (4.9%) and Blue Box support (1.9%) (Figure 1).

5.2. Of the total notified Green Box support (USD 461 billion), China was the largest provider (38.3%, USD 177 billion), followed by the US (30.0%, USD 138 billion), the EU (16.6%, USD 76.7 billion), India (6.6%, USD 30.3 billion) and Japan (3.9%, USD 18.2 billion) (Figure 1). Together, these five Members accounted for 95.5% of total Green Box support.

5.3. In 2019, the total value of Green Box support provided by WTO Members was equal to 11.1% of the total global value of agricultural production (VoP) for that year. In comparison, CTAMS was equal to 1.6%, *de minimis* 1.0%, Article 6.2 0.7%, and Blue Box 0.3%.<sup>10</sup>

<sup>5</sup> Source: <https://www.imf.org/external/datamapper/PCPIPCH@WEO/OEMDC>, accessed 19 April 2023.

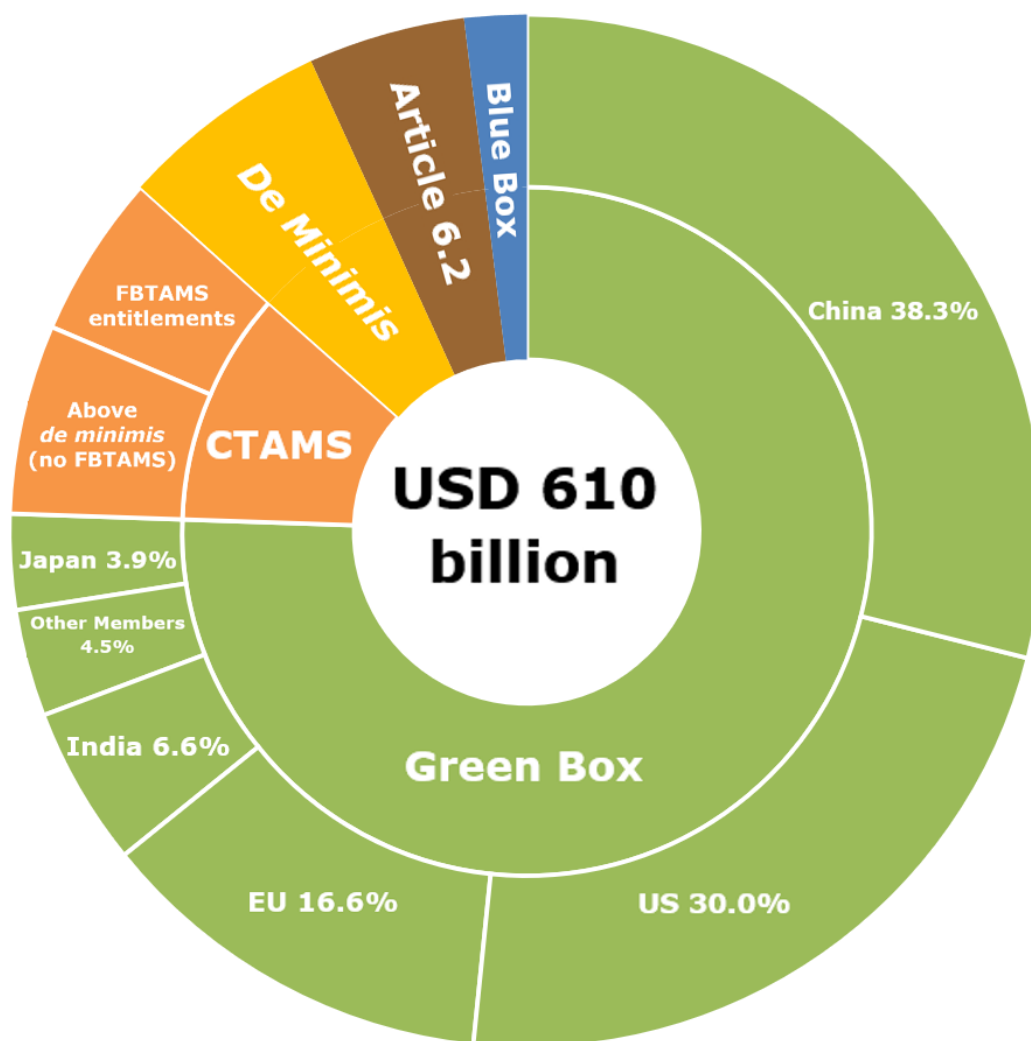
<sup>6</sup> Source: [Exchange Rates Incl. Effective Ex. Rates - IMF Data](#).

<sup>7</sup> Source: [FAOSTAT](#) - this statistic is an approximation because the FAO's statistics database does not include 2019 agricultural production data for all Members included in this analysis.

<sup>8</sup> Cuba was not included in this analysis because it was not possible to obtain inflation data or exchange rates for Cuba for the period analysed (2000-2019).

<sup>9</sup> [Agreement on Agriculture Notifications by agreement - Notification Portal \(wto.org\)](#).

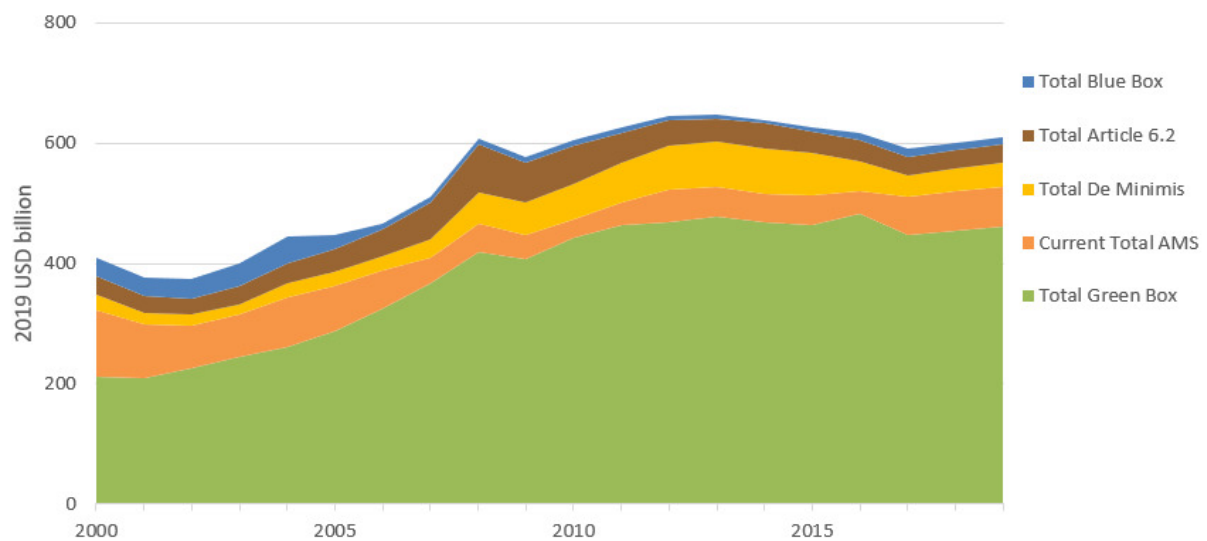
<sup>10</sup> [FAOSTAT](#) - these statistics are approximations because the FAO's statistics database does not include 2019 agricultural production data for all WTO Members. Equally, at the time of publication not all Members had submitted DS:1 notifications for 2019.

**Figure 1: Total Domestic Support, 2019<sup>11</sup>**

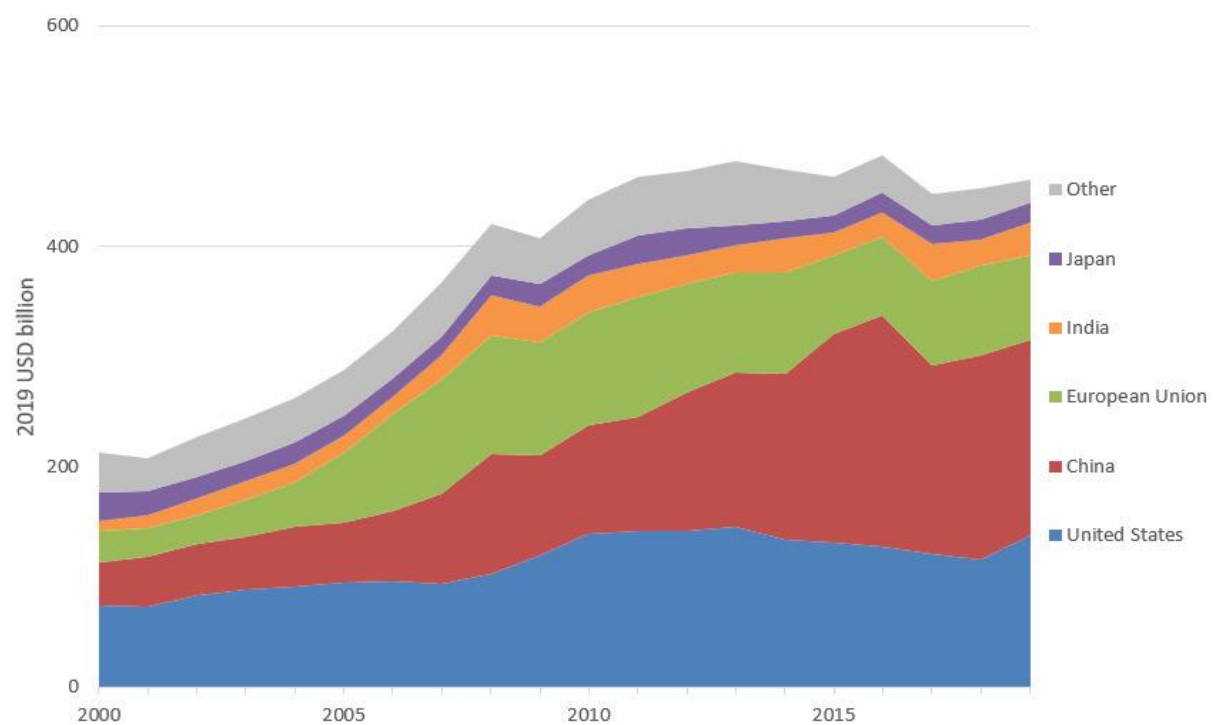
5.4. From 2010 to 2019<sup>12</sup>, there were increases in total annual Green Box support (from USD 442 billion to USD 461 billion), CTAMS (from USD 31.0 billion to USD 67.3 billion), and Blue Box support (from USD 9.65 billion to USD 11.7 billion). There were decreases for *de minimis* (from USD 58.5 billion to USD 40.0 billion) and Article 6.2 support (from USD 65.0 billion to USD 30.0 billion) (Figure 2).

<sup>11</sup> The percentages displayed in this chart next to each Member refer to that Member's contribution to total Green Box support. These percentages do not relate to other types of domestic support i.e. CTAMS, *de minimis*, Article 6.2 or Blue Box. This is a slightly amended graph from that of [JOB/AG/253](#) in that it captures both CTAMS provided through FBTAMS entitlements and CTAMS provided by Members without FBTAMS.

<sup>12</sup> The period 2010 to 2019 is used to report changes in domestic support levels because this period is more relevant to current trends than the 2000-2010 period. The entire 2000-2019 period is displayed in the graphs to illustrate the context that has led to current trends.

**Figure 2: Comparison of Green Box support with other types of support, 2000-2019**

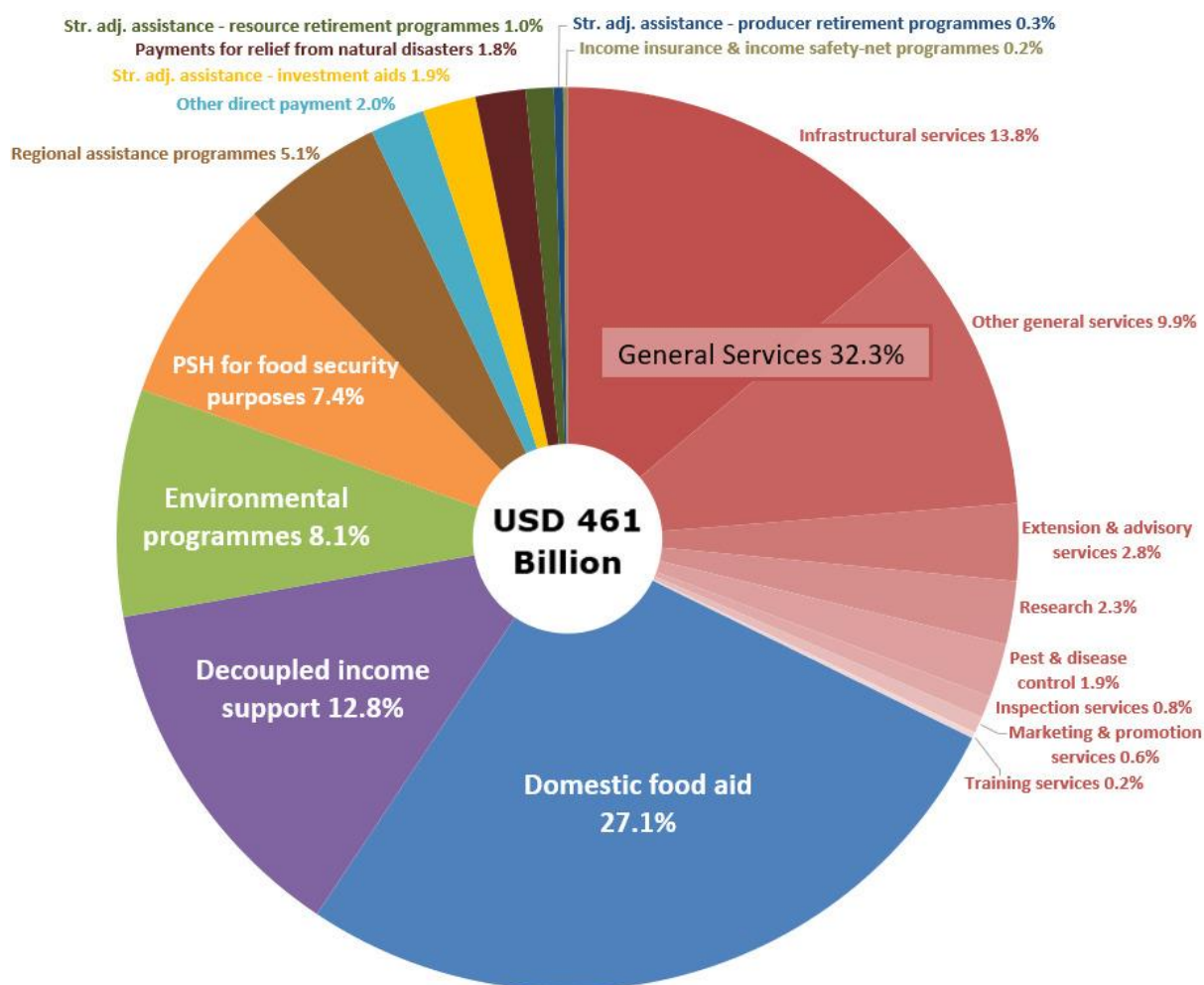
5.5. Of the total Green Box support notified from 2010 to 2019, support decreased in the US (from USD 139 billion to USD 138 billion), the EU (from USD 102 billion to USD 76.7 billion), India (from USD 33.4 billion to USD 30.3 billion) and Japan (from USD 18.3 billion to USD 18.2 billion). It increased in China (from USD 98.8 billion to USD 177 billion) (Figure 3).

**Figure 3: Cross country comparison of total Green Box domestic support 2000-2019**

## 6 CROSS CATEGORY ANALYSIS OF TOTAL GREEN BOX SUPPORT

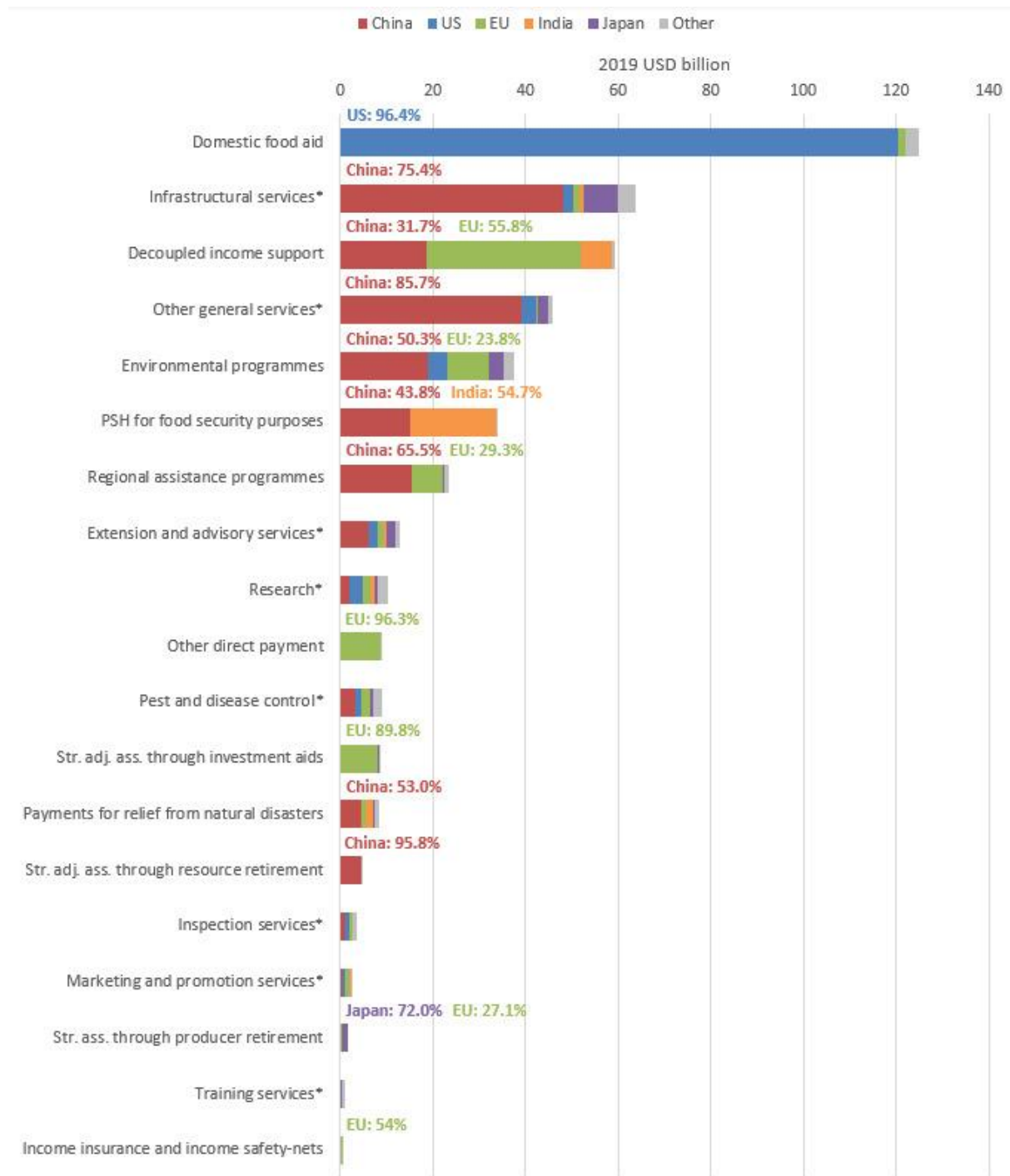
6.1. In 2019, total notified Green Box support equated to USD 461 billion. The largest categories were domestic food aid, which accounted for the largest share (27.1%), followed by infrastructural services (13.8%), decoupled income support (12.8%), other general services<sup>13</sup> (9.9%), environmental programmes (8.1%) and PSH for food security purposes (7.4%) (Figure 4).

**Figure 4: Share of support allocated to different categories of Green Box domestic support, 2019**



6.2. The types of measures supported by different WTO Members under Annex 2 varies significantly. However, over half of Green Box support categories are dominated by one or two of the five largest providers of Green Box support (Figure 5).

<sup>13</sup> "Other general services" refers to programmes that are general services but do not fit into a clearly defined category according to the AoA, Annex 2, paragraphs 2(a) through (g) or have components of more than one category, for example research and extension and advisory services.

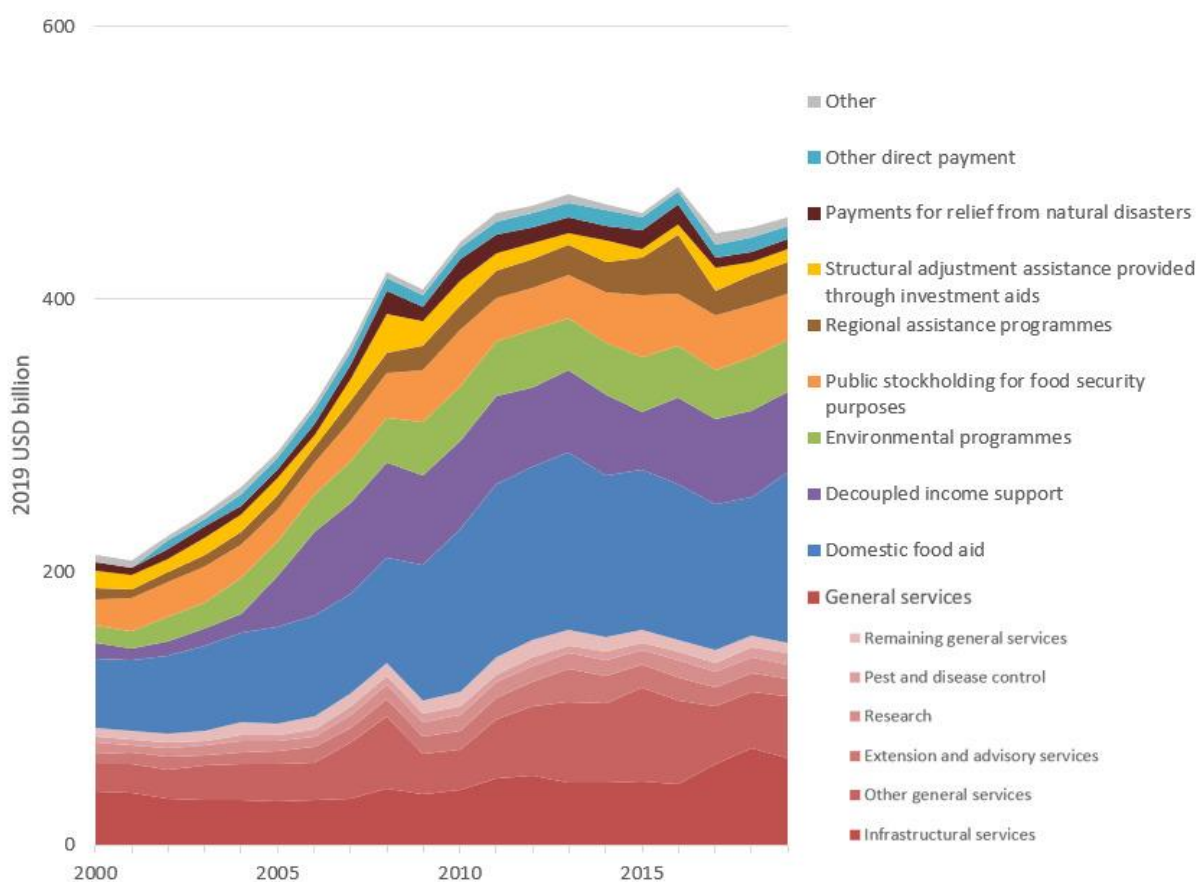
**Figure 5: Categories of Green Box support by Member, 2019**

\* Sub-category of general services.



6.3. From 2010 to 2019, total annual Green Box support increased by 4.8% for domestic food aid (from USD 119 billion to USD 125 billion), by 57.5% for infrastructural services (from USD 40.4 billion to USD 63.7 billion) and by 55.5% for other general services (from USD 29.4 billion to USD 45.7 billion). It decreased by 8.5% for decoupled income support (from USD 64.7 billion to USD 59.2 billion), by 6.9% for environmental programmes (from USD 40.2 billion to USD 37.4 billion) and by 16.9% for PSH for food security purposes (from USD 41.1 billion to USD 34.1 billion) (Figure 6).

**Figure 6: Cross category comparison of total Green Box domestic support 2000-2019**



## 7 ANALYSIS OF INDIVIDUAL CATEGORIES OF GREEN BOX SUPPORT

7.1. This section provides an analysis of the top six categories of Green Box domestic support – domestic food aid, decoupled income support, infrastructural services, other general services, environmental programmes and PSH for food security purposes.

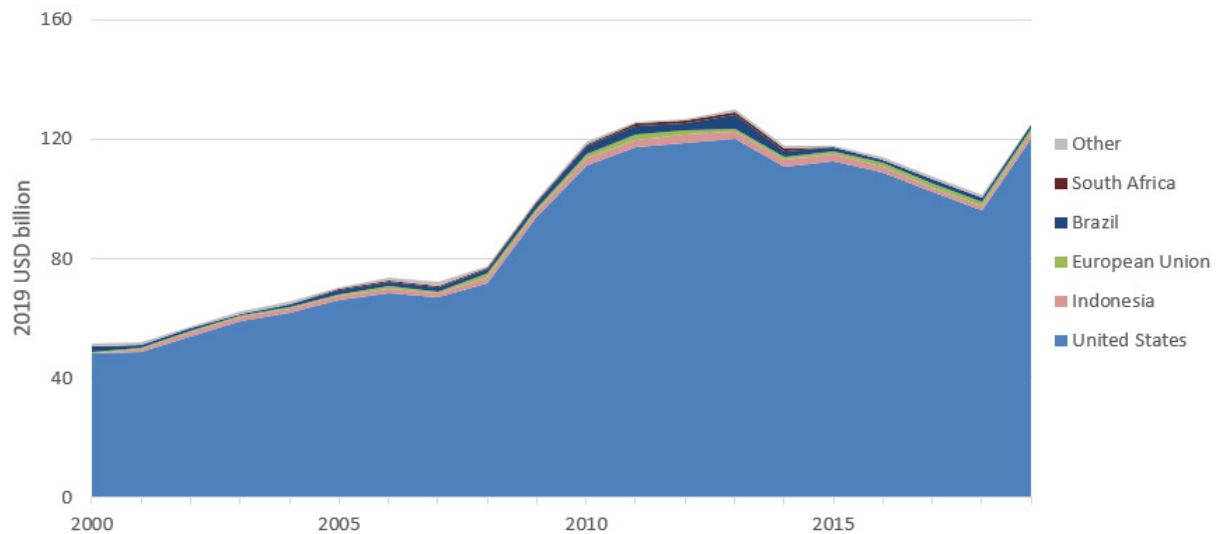
### Domestic food aid

7.2. Between 2010 and 2019, domestic food aid increased from USD 119 billion to USD 125 billion. Among the top five providers of this type of support, its use increased in the US (from USD 111 billion to USD 120 billion) and the EU (from USD 1.09 billion to USD 1.65 billion). It decreased in Indonesia (from USD 2.51 billion to USD 1.72 billion), Brazil (from USD 2.88 billion to USD 1.00 billion) and South Africa (from USD 763 million in 2010 to USD 640 million in 2014)<sup>14</sup> (Figure 7). In 2019, 96.4% of domestic food aid was provided by the US.

<sup>14</sup> At the time of publication, South Africa's most recent DS:1 notification was submitted for 2014.



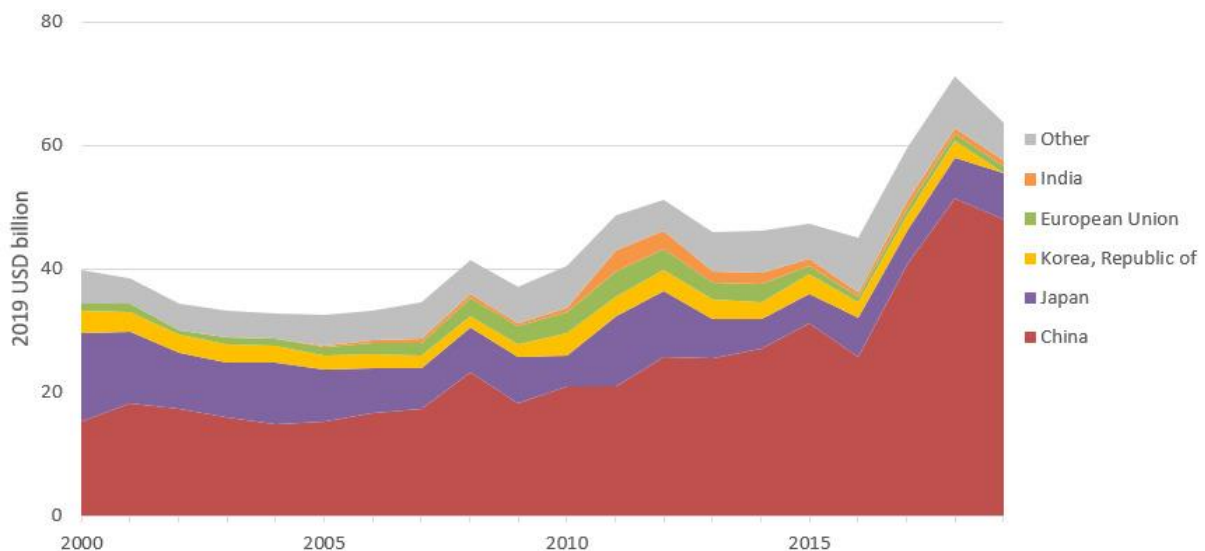
**Figure 7: Cross country comparison of Green Box support for domestic food aid, 2000-2019**



### Infrastructural services

7.3. Between 2010 and 2019, support for infrastructural services increased from USD 40.4 billion to USD 63.7 billion. Among the top five providers of this type of support, its use increased in China (from USD 20.9 billion to USD 48.0 billion), Japan (from USD 5.07 billion to USD 7.49 billion) and India (from USD 557 million to USD 856 million). It decreased in the Republic of Korea (from USD 3.56 billion in 2010 to USD 2.89 billion in 2018)<sup>15</sup> and the EU (from USD 3.46 billion to USD 1.26 billion) (Figure 8). In 2019, 75.4% of infrastructural services was provided by China.

**Figure 8: Cross country comparison of Green Box support for infrastructural services 2000-2019**

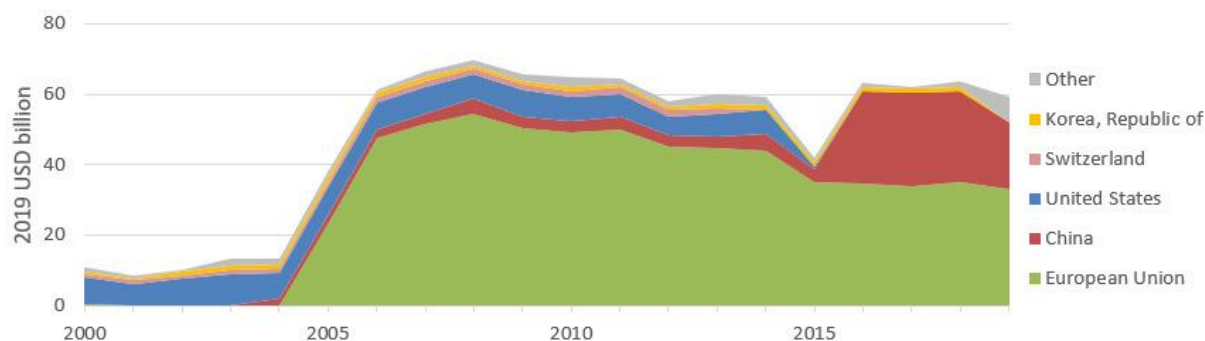


<sup>15</sup> At the time of publication, the Republic of Korea's most recent DS:1 notification was submitted for 2018.

### Decoupled income support

7.4. Between 2010 and 2019, decoupled income support decreased from USD 64.7 billion to USD 59.2 billion. Among the top five providers of this type of support, its use increased in China (from USD 3.02 to USD 18.8 billion) and the Republic of Korea (from USD 986 million in 2010 to USD 1.25 billion in 2018).<sup>16</sup> It decreased in the EU from USD 49.3 billion to USD 33.0 billion), the US (from USD 6.86 billion to USD 0.00) and Switzerland (from USD 1.66 billion to USD 109 million) (Figure 9). In 2019, two Members accounted for the majority of decoupled income support: the EU (55.8%) and China (31.7%).

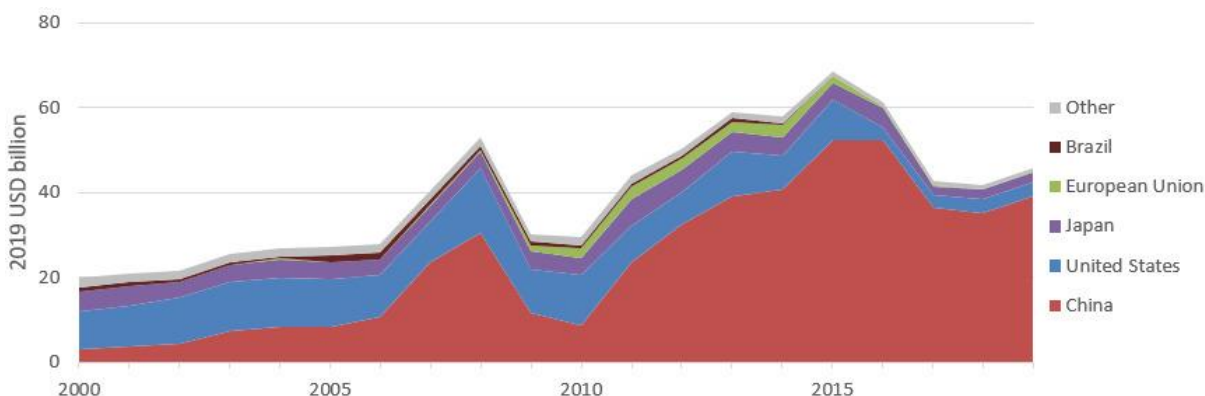
**Figure 9: Cross country comparison of Green Box support for decoupled income support 2000-2019**



### Other general services<sup>17</sup>

7.5. Between 2010 and 2019 support for other general services increased from USD 29.4 billion to USD 45.7 billion. Among the top five providers of this type of support, its use increased in China (from USD 8.75 billion to USD 39.2 billion). It decreased in the US (from USD 11.7 billion to USD 3.28 billion), Japan (from USD 4.24 billion to USD 2.30 billion), the EU (from USD 2.19 billion to USD 146 million) and Brazil (from USD 733 million to USD 57.9 million) (Figure 10). In 2019, 85.7% of other general services was provided by China.

**Figure 10: Cross country comparison of Green Box support for other general services 2000-2019**



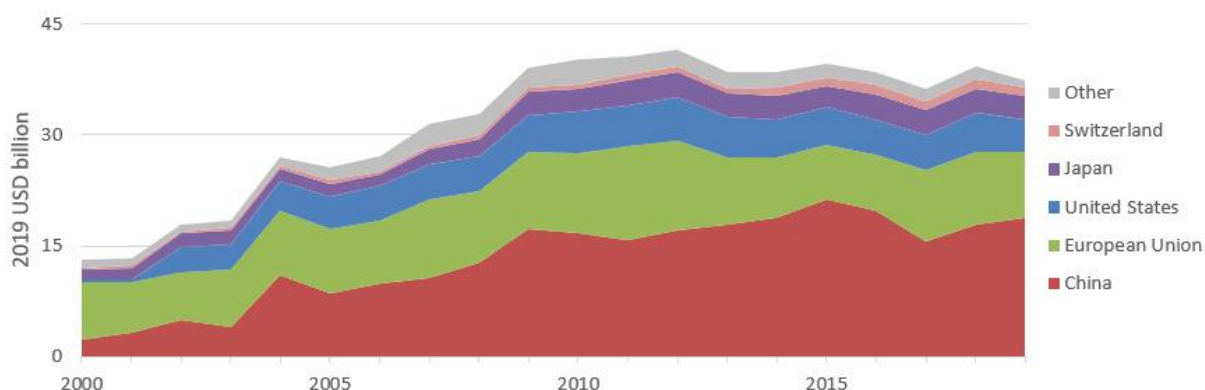
<sup>16</sup> At the time of publication, the Republic of Korea's most recent DS:1 notification was submitted for 2018.

<sup>17</sup> "Other general services" refers to programmes that are general services but do not fit into a clearly defined category according to the AoA, Annex 2, paragraphs 2(a) through (g) or have components of more than one category, for example research and extension and advisory services.

## Environmental programmes

7.6. From 2010 to 2019, support for environmental programmes decreased from USD 40.2 billion to USD 37.4 billion. Among the top five providers of this type of support, its use increased in China (from USD 16.7 billion to USD 18.8 billion), the US (from USD 5.66 billion to USD 4.25 billion), Japan (from USD 3.09 billion to USD 3.25 billion) and Switzerland (from USD 576 million to USD 1.25 billion). It decreased in the EU (from USD 10.8 billion to USD 8.91 billion) (Figure 11). In 2019, two Members accounted for the majority of environmental programmes: China (50.3%) and the EU (23.8%).

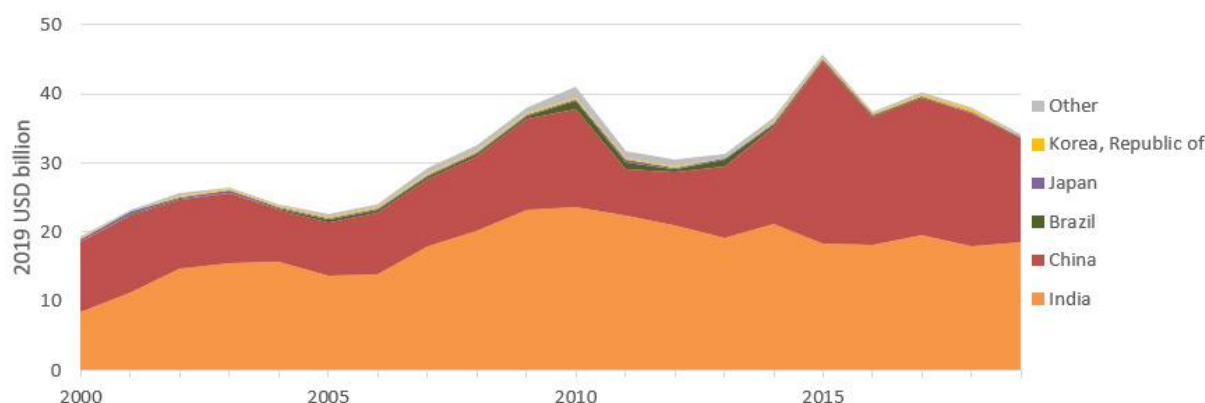
**Figure 11: Cross country comparison of Green Box support for environmental programmes 2000-2019**



## PSH for food security purposes

7.7. From 2010 to 2019, support for PSH for food security purposes decreased from USD 41.1 billion to USD 34.1 billion. Among the top five providers of this type of support, its use increased in China (from USD 14.2 billion to USD 15.0 billion) and the Republic of Korea (from USD 193 million in 2010 to USD 325 million in 2018).<sup>18</sup> It decreased in India (from USD 23.7 billion to USD 18.7 billion), Brazil (from USD 1.09 billion to USD 63.4 million) and Japan (from USD 273 million to USD 141 million) (Figure 12). In 2019, two Members accounted for the majority of PSH for food security purposes: India (54.7%) and China (43.8%).

**Figure 12: Cross country comparison of Green Box support for PSH for food security purposes 2000-2019**



<sup>18</sup> At the time of publication, the Republic of Korea's most recent DS:1 notification was submitted for 2018.

## 8 ANALYSIS OF THE TOP FIVE USERS OF GREEN BOX SUPPORT

8.1. Below follows an in-depth analysis of Green Box support of the top five users of Green Box domestic support over the 2000-2019 period.

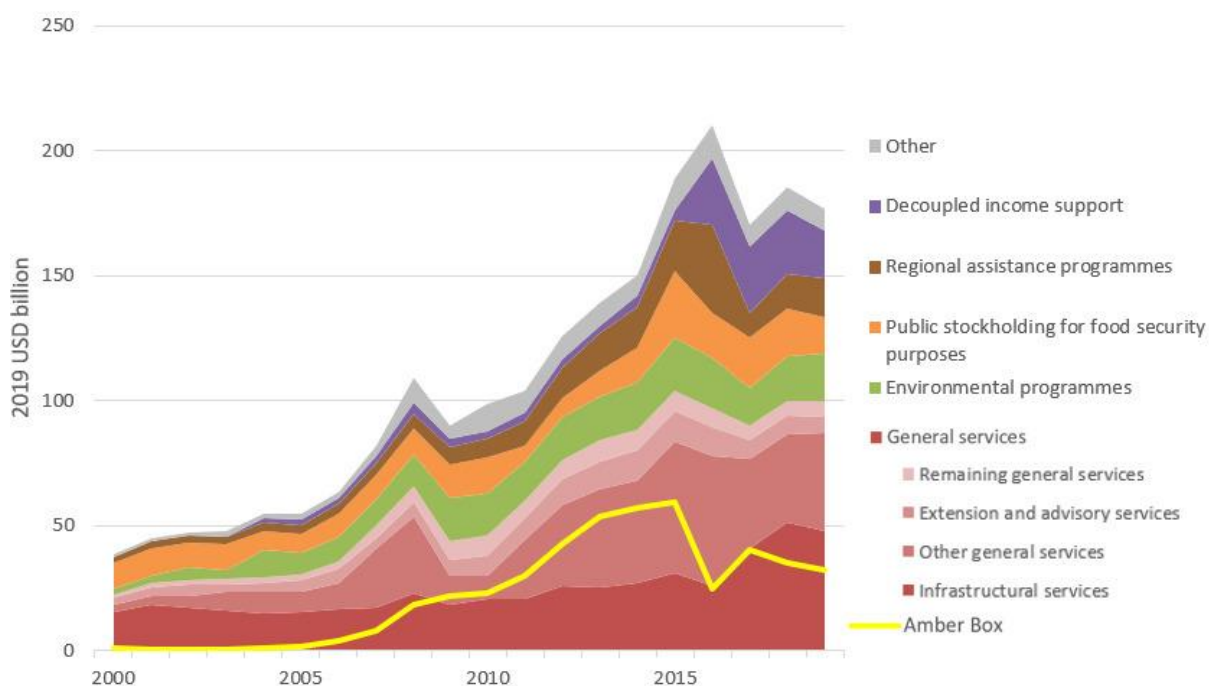
### China

8.2. Between 2000 and 2019, China's largest share of Green Box support was provided for infrastructural services (Figure 13), with this category representing 27.2% of China's Green Box support in 2019. This support was allocated to agricultural comprehensive development programmes, flood control projects, drainage and irrigation facilities, rural roads, rural power grids, small scale watering facilities on farmland, soil and water conservation.

8.3. There was also significant support for other general services, mainly allocated to agricultural administration, operating supports related to buildings, facilities and salaries, external exchanges and cooperation, subsidies on comprehensive financial resources for agriculture, agricultural administrative and services agencies, and pensions to retired employees of these government agencies.

8.4. There were peaks in regional assistance programmes in 2016 (outlays on aid and assistance in disadvantaged regions), infrastructural services from 2017-2019 (see paragraph 8.2 above), other general services in 2007-08 (see 8.3) and decoupled income support from 2016-2019 (direct payments to farmers).

**Figure 13: China Green and Amber Box support, 2000-2019**



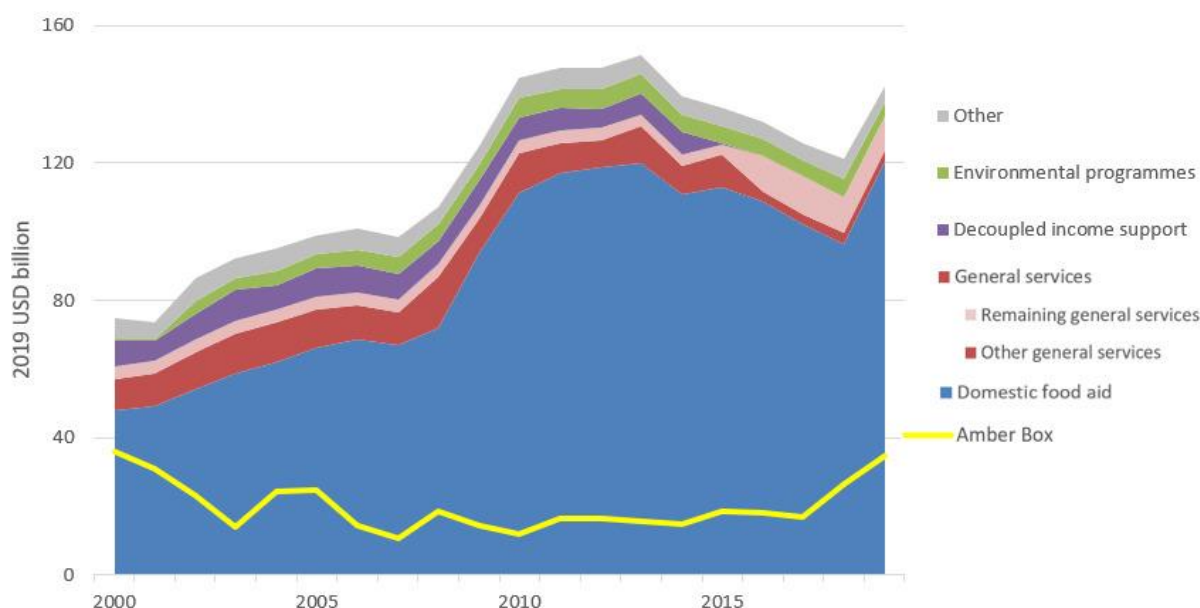
### United States

8.5. Between 2000 and 2019, the US' largest share of Green Box support was provided for domestic food aid (Figure 14), with this category representing 87.0% of US Green Box support in 2019. The majority of this support was allocated to the Food and Nutrition Service's Supplemental Nutrition Assistance Program (SNAP) (formerly Food Stamp Program – low-income people receive financial assistance to help purchase nutritious food) and Child Nutrition Programmes.

8.6. There was consistent spending on other general services over the same period, with a significant decrease in spending in 2016 (the largest amount of support was allocated to state programmes for agriculture). In 2016, the reporting methodology for programmes categorized as "general services" changed, resulting in a number of programs that were previously categorized as other general services being reported as different categories, such as infrastructure services, pest and disease control and research, among others.

8.7. Since 2002, there has also been consistent support allocated to environmental programmes. The environmental programmes allocated the highest amounts of support were the Conservation Reserve Program, the Conservation Stewardship Program and the Environmental Quality Incentives Program (EQIP).

**Figure 14: US Green and Amber Box support, 2000-2019**

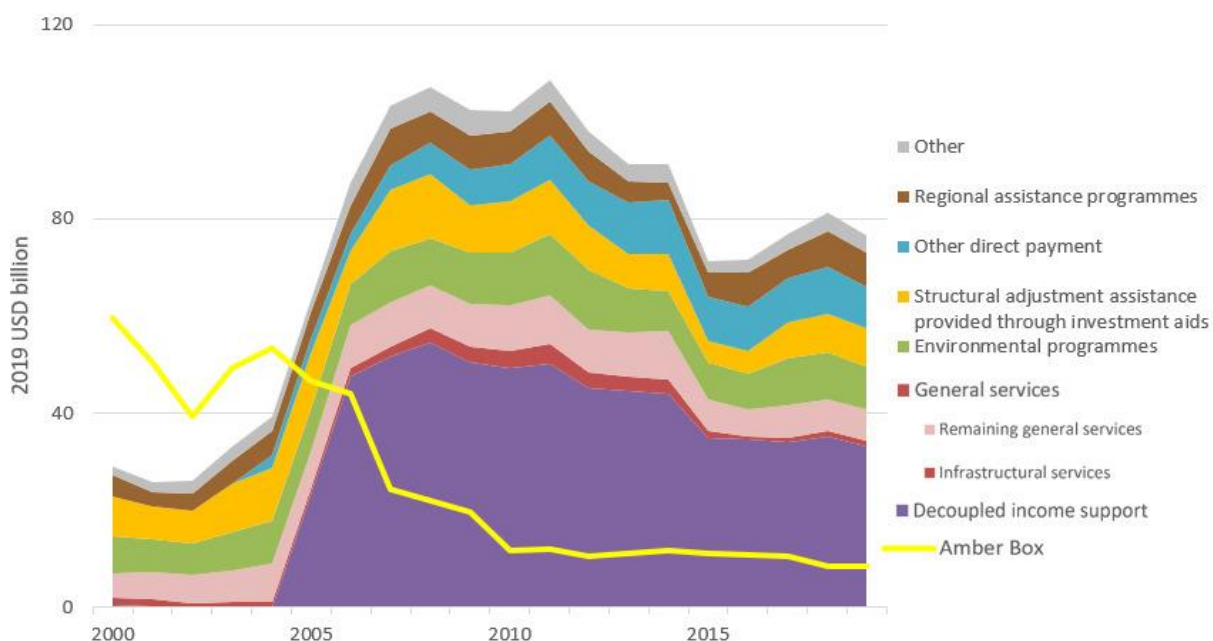


## European Union

8.8. Between 2000 and 2019, the EU's largest share of Green Box support was provided for decoupled income support (Figure 15), with this category representing 43.0% of the EU's Green Box support in 2019. The majority of this support was allocated to the Single Payment Scheme and supplementary aid, Separate Sugar Payment, Separate Fruit and Vegetables Payment, decoupled Complementary National Direct Payments, Basic Payments Scheme and Small Farmers Scheme – before 2005 support for this category was listed as "agri-monetary aid".

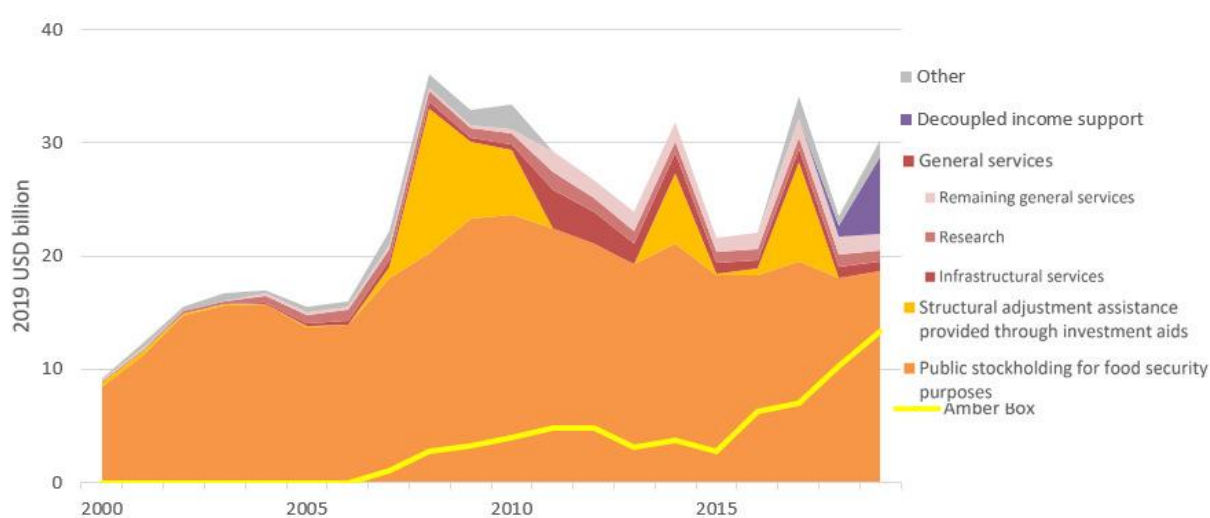
8.9. The EU also provided consistent levels of support for structural adjustment assistance provided through investment aids (aid for farm modernization, young farmers, purchase of machinery, equipment, animals, buildings and plantations, among others measures), environmental programmes (protection of the environment and preservation of the country side and aid for environmentally sensitive areas, among other measures) and regional assistance programmes (specific measures for the benefit of certain disadvantaged areas, other outermost regions, less-favoured areas and mountainous areas).

8.10. There was an increase in support allocated to other direct payments in 2004 (single area payment scheme (SAPS), including for young farmers payment, redistributive payments, payments for areas with natural constraints, Small Farmers Scheme and greening payment and Transitional National Aid), with a gradual increase until 2014 and then remaining relatively consistent up to 2019.

**Figure 15: EU Green and Amber Box support, 2000-2019****India**

8.11. Between 2000 and 2019, India's largest share of Green Box support was provided for PSH for food security purposes (Figure 16), with this category representing 61.7% of India's Green Box support in 2019. This support was directed towards allocation for distribution and buffer stock.

8.12. There were peaks in spending for structural adjustment assistance provided through investment aids in 2007-10 (the majority of support was allocated to the provision of loans at concessional rates and debt waivers), 2014 and 2017 (waiving off agricultural loans) and decoupled income support in 2018-19 (Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) – a scheme that aims to supplement the financial needs of small and marginal farmers).

**Figure 16: India Green and Amber Box support, 2000-2019**



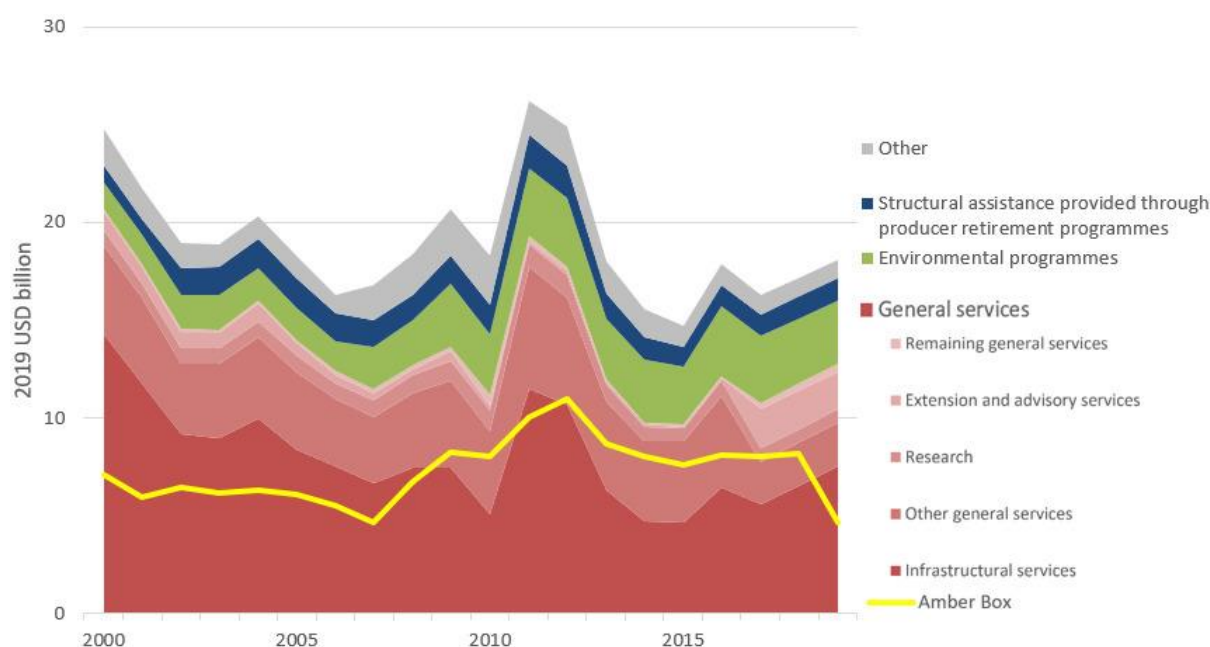
## Japan

8.13. Between 2000 and 2019, Japan's largest share of Green Box support was provided for infrastructural services (Figure 17), with this category representing 41.2% of Japan's Green Box support in 2019. The majority of this support was allocated to infrastructural services for the agricultural sector and rural areas, including the construction of irrigation/drainage facilities and rural roads, land consolidation, electricity reticulation, market and port facilities, and infrastructural works associated with environmental programmes, among other measures).

8.14. There was also consistent spending on other general services across the same period, with the largest amount of support allocated to personnel expenses for government officials.

8.15. There was a gradual increase in spending on environmental programmes across entire period with the largest amount of this support allocated to payments for maintaining paddy fields in environmentally good condition through growing any plants other than rice or other appropriate management.

**Figure 17: Japan Green and Amber Box support, 2000-2019**



## 9 CONCLUSION

9.1. It is critical that domestic agricultural policies are designed in a way that enables Members to address increasing global challenges to agricultural production and trade – including helping to drive more sustainable, productive and climate-resilient agricultural sectors – while minimizing negative impacts and distortions to international agricultural markets.

9.2. The Green Box aims to ensure Members have sufficient policy space to pursue a broad range of objectives by exempting such support measures from reduction commitments on the condition they meet the fundamental requirement of having no, or at most minimal, trade-distorting effects or effects on production. As this paper demonstrates, the use of the Green Box forms a significant component of total notified domestic support, though largely concentrated in a small number of categories and Members, and its use has grown over time. Further examination of support provided under the Green Box may help clarify the types of programmes and policies that meet the criteria of the Green Box and inform discussions on the effectiveness of such measures on agricultural production and trade, and the experience of Members in using or seeking to use Green Box support to meet their agricultural policy objectives.