9. Food and Agriculture: Sustainable Agriculture

Commitment [#77]

"[We recognize the need to adapt agriculture to climate change and we recognize the importance of improving the efficiency of water and soil use in a sustainable manner. To this end,] we support the development of and a greater use of available technologies, well-known practices and techniques such as soil fertility enhancement, minimum tillage and agroforestry."

Los Cabos Summit Final Declaration

Country	Lack of Compliance	Work in Progress	Full Compliance
Argentina			+1
Australia			+1
Brazil			+1
Canada			+1
China	-1		
France			+1
Germany		0	
India		0	
Indonesia			+1
Italy		0	
Japan	-1		
Korea	-1		
Mexico		0	
Russia			+1
Saudi Arabia		0	
South Africa			+1
Turkey		0	
United Kingdom			+1
United States			+1
European Union		0	
Average Score		+0.35	

Assessment

Background

At the Los Cabos Summit held on 18-19 June 2012, G20 Leaders affirmed their on-going commitment to improving domestic food and agricultural practices, with a particular focus on adapting agriculture so as to mitigate its contributions to climate change.²⁰⁸⁴ The commitment responds to calls for heightened international cooperation on the use of land and water resources recently expressed by the United Nations. As put forth by the Food and Agriculture Organization of the United Nations (FAO), "Increasing competition over natural resources because of population and economic growth, climate change and other drivers is magnifying the challenges of natural resource management."²⁰⁸⁵ In such progressively challenging conditions, it becomes

http://www.g20.utoronto.ca/2012/2012-0619-loscabos.html.

²⁰⁸⁴ G20 Leaders Declaration, G20 Information Center (Toronto) 19 June 2012. Date of Access: 8 December 2012.

²⁰⁸⁵ Report 16: International Cooperation for Sustainable Land and Water Management, Food and Agriculture Organization of the United Nations (Rome) 2011. Date of Access: 7 December 2012.

crucial to bring attention to and make decisions on the sustainable use of land and water in agriculture to "ensure land and water remain a conduit for agricultural and economic growth and for the general advancement of human well-being."²⁰⁸⁶

Several international conventions and initiatives have been developed in order to foster international cooperation. The 1972 United Nations Conference on Human Environment in Stockholm served as the catalyst that brought the need for cooperation on environment and natural resource management to the fore. The 1992 United Nations Conference on Environment and Development (UNCED), also known as the Earth Summit, in Rio de Janeiro reaffirmed the need for enhanced natural resource management.²⁰⁸⁷ These have been followed by several other international conferences, the most recent of which was the 2012 United Nations Conference on Sustainable Development held in Rio de Janeiro, and international and regional agreements. As the FAO asserts, "International cooperation on agricultural research has been one of the shining examples of successful cooperation and has achieved significant impacts on the livelihoods of the global community."²⁰⁸⁸

To further strengthen the existing international commitment to sustainable use of world resources, at past G20 summits, including the Toronto Summit in 2010 and the Cannes Summit in 2011, the member states have made a variety of commitments to address matters in the domain of food and agriculture, which have included excessive price volatility and food export restrictions.²⁰⁸⁹ Also in line with their continuing support for efficient use of world resources, at the Los Cabos Summit in 2012, the G20 members committed to engaging in practices that focus on adapting agricultural practices to climate change and improving the efficiency of water and soil use. These practices include, but are not limited to, adopting methods to enhance soil fertility, engaging in minimum tillage, and promoting agroforestry domestically.

Recognizing the need to disseminate sustainable agriculture practices, FAO endorses and encourages the use of several such practices:

1) Direct seeding or planting, which is equivalent to minimum tillage, involves "growing crops without mechanical seedbed preparation and with minimal soil disturbance since the harvest of the previous crop."²⁰⁹⁰

http://www.fao.org/fileadmin/templates/solaw/files/thematic_reports/TR_16_web.pdf.

²⁰⁸⁶ Report 16: International Cooperation for Sustainable Land and Water Management, Food and Agriculture Organization of the United Nations (Rome) 2011. Date of Access: 7 December 2012. http://www.fao.org/fileadmin/templates/solaw/files/thematic_reports/TR_16_web.pdf.

²⁰⁸⁷ Report 16: International Cooperation for Sustainable Land and Water Management, Food and Agriculture Organization of the United Nations (Rome) 2011. Date of Access: 7 December 2012. http://www.fao.org/fileadmin/templates/solaw/files/thematic_reports/TR_16_web.pdf.

²⁰⁸⁸ Report 16: International Cooperation for Sustainable Land and Water Management, Food and Agriculture Organization of the United Nations (Rome) 2011. Date of Access: 7 December 2012. http://www.fao.org/fileadmin/templates/solaw/files/thematic_reports/TR_16_web.pdf.

 ²⁰⁸⁹ 2011 Cannes G20 Summit Final Compliance Report, G20 Information Center (Toronto), 16 June 2012.
Date of Access: 8 December 2012.

http://www.g20.utoronto.ca/compliance/2011cannes-final/index.html.

²⁰⁹⁰ The Main Principles of Conservation Agriculture, Food and Agriculture Organization of the United Nations (Rome) 2012. Date of Access: 8 December 2012. http://www.fao.org/ag/ca/1b.html

2) The use of permanent soil covers is necessary to protect the soil against a range of harmful environmental exposures, to provide the organisms in the soil with nutrients, and to alter the microclimate in the soil to induce optimal growth and development of soil organisms.²⁰⁹¹

3) Crop rotation is necessary to provide a diversity of nutrients to the soil organisms and to allow these organisms to reach the different soil layers.²⁰⁹²

These practices, among others, are examples of agriculture methods that improve the efficiency of water and soil use in a sustainable manner.

Definitions

Agroforestry — the management approach of intentional combining of agriculture and working trees to create sustainable farming and ranching systems.²⁰⁹³

Minimum tillage — is the tillage practice in which the seeds are placed into the soil with the minimum soil disturbance possible.²⁰⁹⁴

Commitment Features

There are three components to watch in this commitment:

In order to fully comply with the commitment, the member state must foster both the development and greater use of available technologies, practice, and techniques which produce minimal harm to the environment. If the member state promotes either the development or the greater use of such mechanisms, then their actions will be qualified as partial compliance.

All developments and implementation frameworks should be on a national level; adopted international developments and implementation frameworks are not acceptable.

Despite the commitment's explicit mentioning of soil fertility enhancement, minimum tillage, and agroforestry, the commitment does not limit the members to those three. The member is free to turn to other available technologies, well-known practices and techniques for improving the efficiency of water and soil use in a sustainable manner to qualify for full compliance.

Scoring Guidelines

1	Member takes no steps to improve the efficiency of water and soil use in a sustainable manner through development AND implementation of available technologies, well-
	known practices, and techniques such as soil fertility enhancement, minimum tillage, and agroforestry.

²⁰⁹¹ The Main Principles of Conservation Agriculture, Food and Agriculture Organization of the United Nations (Rome) 2012. Date of Access: 8 December 2012.

²⁰⁹⁴ Conservation Agriculture: Soil Tillage, Food and Agriculture Organization of the United Nations (Rome) 2012. Date of Access: 8 December 2012. http://www.fao.org/ag/ca/3b.html.

http://www.fao.org/ag/ca/1b.html

²⁰⁹² The Main Principles of Conservation Agriculture, Food and Agriculture Organization of the United Nations (Rome) 2012. Date of Access: 8 December 2012.

http://www.fao.org/ag/ca/1b.html

²⁰⁹³ Agroforestry – Enriching Our Lives With Trees That Work, United States Department of Agriculture National Agroforestry Center (Lincoln) 18 February 2012. Date of Access: 7 December 2012. <u>http://nac.unl.edu/documents/multimedia/presentations/Canned-PowerPoints/AgroforestryOverview2-18-12.ppt.</u>

0	Member takes steps to improve the efficiency of water and soil use in a sustainable manner through development OR implementation of available technologies, well-known practices, and techniques such as soil fertility enhancement, minimum tillage, and agroforestry.
+1	Member takes steps to improve the efficiency of water and soil use in a sustainable manner through development AND implementation of available technologies, well-known practices, and techniques such as soil fertility enhancement, minimum tillage, and agroforestry.

Lead Analyst: Samantha Young

Argentina: +1

Argentina has fully complied with its commitment to support the development and greater use of available technologies to improve water efficiency and the sustainable use of soil. Government of Argentina has continued to enhance the country's agriculture initiatives that had been instituted in recent years, with a renewed focus on promoting sustainability efforts.

In January 2013, Argentina participated in the 5th Berlin Agriculture Minister's Summit.²⁰⁹⁵ The Argentinian delegation joined the Summit's participants in a call to increase capital investments to develop a sustainable agri-food industry, especially in developing countries.²⁰⁹⁶

On 6 December 2012, the National Institute for Agricultural Technology (INTA) presented a management module to the country's Chaco region that involves adopting a silvopastoral management system for its forests.²⁰⁹⁷ Silvopasture is an agroforestry technique that involves the introduction of trees within a forage production system.²⁰⁹⁸ The presentation was held in Santiago del Estero and involved officials from the INTA, as well as regional INTA representatives from Chaco, the Ministry of Agriculture, and various non-governmental organizations.²⁰⁹⁹

http://nac.unl.edu/silvopasture.htm.

²⁰⁹⁵ Participating countries of the Berlin Agriculture Ministers' Summit 2013, Federal Ministry of Food, Agriculture and Consumer Protection (Bonn) 19 January 2013. Date of Access: 8 February 2013. <u>http://www.bmelv.de/SharedDocs/Downloads/Ministerium/Veranstaltungen/GFFA2013/participating_countries_Agraministergipfel2013_EN.pdf?__blob=publicationFile</u>.

²⁰⁹⁶ Press release no. 22 from 19.01.13: Berlin Agriculture Ministers' Summit 80 countries commit themselves to a resolute fight against hunger, Federal Ministry of Food, Agriculture and Consumer Protection (Bonn) 19 January 2013. Date of Access: 8 February 2013.

http://www.bmelv.de/SharedDocs/Pressemitteilungen/EN/2013/0022-Internationaler-Agrarministergipfel.html.

²⁰⁹⁷ Se Presentó Formalmente el Módulo Experimental con Fines Demostrativos en la Región Chaqueña, Ministerio de Agricultura, Ganaderia y Pesca (Buenos Aires) 6 December 2012. Date of Access: 21 December 2012.

http://64.76.123.202/site/_css/leer.php?imp=1&url=forestacion/proyectos_forestales/_noticias/1212060050_00.txt.

 ²⁰⁹⁸ Silvopasture, United States Department of Agriculture: National Agroforestry Centre (Lincoln) 2012.
Date of Access: 21 December 2012.

²⁰⁹⁹ Se Presentó Formalmente el Módulo Experimental con Fines Demostrativos en la Región Chaqueña, Ministerio de Agricultura, Ganaderia y Pesca (Buenos Aires) 6 December 2012. Date of Access: 21 December 2012.

http://64.76.123.202/site/_css/leer.php?imp=1&url=forestacion/proyectos_forestales/_noticias/1212060050 00.txt.

On 25 July 2012, the Ministry of Agriculture, Livestock, and Fisheries advertised in an on-line news bulletin for a course in organic production for people in agricultural engineering.²¹⁰⁰ The course, run by the INTA, focuses on promoting sustainable agricultural techniques such as soil fertility enhancement, organic soil management, and crop rotation. The bulletin stated that 35 per cent of Argentina's vegetable crop is organic, and that the Ministry of Agriculture "promotes organic production" through actions such as these training sessions.²¹⁰¹

Additionally, on 4 September 2012, the Ministry of Agriculture held a workshop session that considered proposals on how farmers can better contribute to conservation and forestry management efforts.²¹⁰²

In 2010, the Ministry of Agriculture allocated funding to a project called Programa Nacional de Agricultura Periurbana, which is aimed at helping small farmers and municipalities develop their agricultural and economic capabilities.²¹⁰³ Throughout all of 2012, it has continued to distribute funds to rural municipalities such as Corrientas (ARS1.5 million)²¹⁰⁴ and cooperatives that support small farmers (ARS22 million).²¹⁰⁵

On 14 April 2014, the National Institute for Agricultural Technology announced that it was continuing its training workshops for the month of April in organic gardening. These workshops are meant to foster conservation techniques amongst small- and medium-level producers in Argentina, and address the resources and design needed to implement organic farming techniques on a wider level.²¹⁰⁶

²¹⁰⁰ Formación de Asesores en Producción de Cultivos Intensivos, Ministerio de Agricultura, Ganaderia y Pesca (Buenos Aires) 25 July 2012. Date of Access: 21 December 2012.

http://www.minagri.gob.ar/site/institucional/prensa/index.php?edit_accion=noticia&id_info=12072513412 7.

 <sup>7.
&</sup>lt;sup>2101</sup> Formación de Asesores en Producción de Cultivos Intensivos, Ministerio de Agricultura, Ganaderia y Pesca (Buenos Aires) 25 July 2012. Date of Access: 21 December 2012.

http://www.minagri.gob.ar/site/institucional/prensa/index.php?edit_accion=noticia&id_info=12072513412 7.

⁷. ²¹⁰² Taller de Formulación de Subproyectos Forestales de Producción y Conservación, Ministerio de Agricultura, Ganaderia y Pesca (Buenos Aires) 4 September 2012. Date of Access: 24 December 2012. <u>http://64.76.123.202/site/_css/leer.php?imp=1&url=forestacion/proyectos_forestales/_noticias/1209040050</u> <u>00.txt.</u>

²¹⁰³ Programa Nacional de Agricultura Periurbana, Ministerio de Agricultra Ganaderia y Pesca (Buenos Aires) 2012. Date of Access: 21 December 2012.

http://64.76.123.202/site/economias_regionales/institucional/03_Programas_Vigentes/05_Programa_Nacio nal_de_Agricultura_Periurbana/index.php. ²¹⁰⁴ Yauhar Firmó un Convenio por 1.500.000 Pesos para Corrientes, Ministerio de Agricultura Ganaderia y

²¹⁰⁴ Yauhar Firmó un Convenio por 1.500.000 Pesos para Corrientes, Ministerio de Agricultura Ganaderia y Pesca (Buenos Aires) 20 November 2012. Date of Access: 22 December 2012.

http://www.minagri.gob.ar/site/institucional/prensa/index.php?edit_accion=noticia&id_info=12112112233

 <sup>5.
&</sup>lt;sup>2105</sup> Yauhar Entregó Más de \$22 Millones a Cooperativas, Ministerio de Agricultura Ganaderia y Pesca (Buenos Aires) 13 November 2012. Date of Access: 22 December 2012.

http://www.minagri.gob.ar/site/institucional/prensa/index.php?edit_accion=noticia&id_info=12112112164 8.

 ²¹⁰⁶ Continúan Los Talleres de Huerta Orgánica, Ministerio de Agricultura, Ganaderia y Pesca (Buenos Aires) 12 April 2013. Date of Access: 1 June 2013.

http://www.minagri.gob.ar/site/institucional/prensa/index.php?edit_accion=noticia&id_info=13041213574 1.

On 14 June 2013, the Argentine Ministry of Agriculture announced that it would develop a program that promotes conservation practices and land use optimization to farmers.²¹⁰⁷ The program is called Programa Nacional de Titulación y Arraigo Rural ("The National Program of Rural Tilting and Rooting"). It will be executed on a provincial and municipal level and is meant to increase rural employment in the country.²¹⁰⁸

Thus, Argentina receives a score of +1 for its efforts to develop conservation and forest management practices appropriate for the country's agricultural sector and its promotion of sustainable agricultural techniques.

Analyst: Vipasha Shaikh

Australia: +1

Australia has complied with its commitment on sustainable agriculture, implementing many measures that aim to address the detrimental effects of climate change on agriculture. The Department of Agriculture, Forestry, and Fisheries has maintained that it "is preparing for the impacts of climate change."2109 In particular, the Australian government is "investing in the science and research that provides the information and skills needed to help communities, industries, and governments to adapt to a changing climate."2110

On 14 November 2012, Australia's Minister for Agriculture, Fisheries and Forestry Joe Ludwig reaffirmed the Australian government's commitment to prioritizing research for farmers and other land managers, announcing the second round of competitive grants totalling AUD50 million for the "Filling the Research Gap" program.²¹¹¹ The program aims to "support research into emerging abatement technologies, strategies and innovative management practices that reduce greenhouse gas emissions from the land sector, sequester carbon, and enhance sustainable agricultural practices."2112

On 27 November 2012, Minister Ludwig launched a revised Climate Change Research Strategy for Primary Industries that seeks to "build a sustainable, strong and viable future for Australia's

²¹⁰⁷ Agricultura creó el Programa Nacional de Titulación y Arraigo Rural, Ministerio de Agricultura, Ganaderia y Pesca (Buenos Aires) 14 June 2013. Date of Access: 15 June 2013.

http://www.minagri.gob.ar/site/institucional/prensa/index.php?edit accion=noticia&id info=13061414132

 $[\]frac{0.}{2108}$ Agricultura creó el Programa Nacional de Titulación y Arraigo Rural, Ministerio de Agricultura, Ganaderia y Pesca (Buenos Aires) 14 June 2013. Date of Access: 15 June 2013.

http://www.minagri.gob.ar/site/institucional/prensa/index.php?edit accion=noticia&id info=13061414132

 $[\]frac{0}{2109}$ How We Are Responding to Climate Change, Department of Agriculture, Fisheries and Forestry (Canberra) 6 December 2012. Date of Access: 5 January 2013.

http://www.daff.gov.au/climatechange/climate.²¹¹⁰ How We Are Responding to Climate Change, Department of Agriculture, Fisheries and Forestry (Canberra) 6 December 2012. Date of Access: 5 January 2013.

http://www.daff.gov.au/climatechange/climate.

Priority Research for Farmers and Other Land Managers, Department of Agriculture, Fisheries and Forestry (Canberra) 14 November 2012. Date of Access: 5 January 2013.

http://www.daff.gov.au/ludwig/media office/media releases/media releases/2012/november/priorityresearch-for-farmers-and-other-land-managers.

²¹¹² Filling the Research Gap, Department of Agriculture, Fisheries and Forestry (Canberra) 6 December 2012. Date of Access: 5 January 2013.

http://www.daff.gov.au/climatechange/carbonfarmingfutures/ftrg.

primary industries."²¹¹³ Minister Ludwig noted that the strategy highlights the importance of the country's agricultural sector and will be used to "help mitigate the impacts of climate change through a wide range of research, development and extension."2114

Additionally, on 3 November 2012, the Department of Agriculture, Farming, and Fishing announced that applications for the government's AUD64 million "Carbon Farming Futures Extension and Outreach Program" were open.²¹¹⁵ Established on 17 May 2012, prior to the Los Cabos Summit, the Program provides grants to assist farmers and land managers "to adopt technologies and practices to reduce greenhouse gas emissions."²¹¹⁶ Through this program, the Australian government is in the process of delivering AUD429 million over six years so as to "fund measures to help land managers benefit from carbon farming and unlock financial opportunities."2117

Furthermore, Government of Australia has committed AUD2.2 billion over five years to the initiative "Caring for our Country," with funding commencing on 1 July 2013.²¹¹⁸ The initiative has two specific streams; one dedicated to sustainable environment and the other to sustainable agriculture.²¹¹⁹ In October 2012, Government of Australia announced an allocation of AUD700 million for the sustainable agriculture stream.²¹²⁰

At a more local level, on 23 November 2012, Minister Ludwig awarded a AUD302.5 thousand grant to volunteers of Landcare, a community-based movement that has "played a major role in raising awareness, influencing farming and land management practices and delivering

²¹¹³ New Strategy in the Fight Against Climate Change, Department of Agriculture, Fisheries and Forestry (Canberra) 27 November 2012. Date of Access: 5 January 2013.

http://www.daff.gov.au/ludwig/media office/media releases/media releases/2012/november/new-strategyin-the-fight-against-climate-change. ²¹¹⁴ New Strategy in the Fight Against Climate Change, Department of Agriculture, Fisheries and Forestry

⁽Canberra) 27 November 2012. Date of Access: 5 January 2013.

http://www.daff.gov.au/ludwig/media office/media releases/media releases/2012/november/new-strategyin-the-fight-against-climate-change.

²¹¹⁵ Support for Climate Action on Farms, Department of Agriculture, Fisheries and Forestry (Canberra) 3 November 2012. Date of Access: 5 January 2013.

http://www.maff.gov.au/media office/media releases/media releases/2012/november/support-for-climateaction-on-farms. ²¹¹⁶ Support for Climate Action on Farms, Department of Agriculture, Fisheries and Forestry (Canberra) 3

November 2012. Date of Access: 5 January 2013.

http://www.maff.gov.au/media office/media releases/media releases/2012/november/support-for-climateaction-on-farms.

How We Are Responding to Climate Change, Department of Agriculture, Fisheries and Forestry (Canberra) 6 December 2012. Date of Access: 5 January 2013.

http://www.daff.gov.au/climatechange/climate.²¹¹⁸ National Biodiversity Investment Prospectus Launched, Invest in Australia (Sydney) 11 December 2012. Date of Access: 5 January 2013.

http://www.investinaustralia.com/news/national-biodiversity-investment-prospectus-launched-12c3.

National Biodiversity Investment Prospectus Launched, Invest in Australia (Sydney) 11 December 2012. Date of Access: 5 January 2013.

http://www.investinaustralia.com/news/national-biodiversity-investment-prospectus-launched-12c3. Support From the Ground Up With New Advocate for Soil Health, Department of Agriculture,

Fisheries and Forestry (Canberra) 26 October 2012. Date of Access: 5 January 2013.

http://www.daff.gov.au/ludwig/media office/media releases/media releases/2012/october/support-fromthe-ground-up-with-new-advocate-for-soil-health.

environmental outcomes across Australian landscapes."2121 Indeed, Government of Australia has dedicated over AUD200 million to Landcare activities over the next five years.²¹²²

The Australian government has taken steps to enhance the sustainability of the country's fisheries and waters more generally. On 11 September 2012, Minister Ludwig announced a major review of policies and legislation involving Australia's fisheries, "the first of its kind in over twenty years."²¹²³ The minister noted that the review is meant to identify any improvements that are needed to ensure the industry's sustainability.²¹²⁴ Also, on 22 November 2012, the Australian government adopted a plan to restore flows to the Murray-Darling River Basin - a key source of the country's agricultural production and harbours 30,000 unique wetlands.²¹²⁵

On 11 December 2012, Australian Environment Minister Tony Burke released the federal government's first national biodiversity prospectus entitled "Our Land - Many Stories: Prospectus of Investment 2013-14."²¹²⁶ Minister Burke stated that the Australian government must "take up the opportunities we have right now for conservation and natural resources management in a changing climate.²¹²⁷ The minister noted the importance of conserving the country's marine environments through federal investment, maintaining that, "it is important that our urban and coastal waterways are protected."2128

(Canberra) 11 September 2012. Date of Access: 5 January 2013.

http://www.daff.gov.au/ludwig/media office/media releases/media releases/2012/september/majorreview-of-australian-fisheries-management. 2125 A Groundbreaking Agreement to Save Australia's Ailing Murray River, National Geographic

(Washington) 28 December 2012. Date of Access: 5 January 2013.

²¹²⁷ National Biodiversity Investment Prospectus Launched, Invest in Australia (Sydney) 11 December 2012. Date of Access: 5 January 2012.

http://www.investinaustralia.com/news/national-biodiversity-investment-prospectus-launched-12c3.

²¹²⁸ National Biodiversity Investment Prospectus Launched, Invest in Australia (Sydney) 11 December 2012. Date of Access: 5 January 2012.

http://www.investinaustralia.com/news/national-biodiversity-investment-prospectus-launched-12c3.

²¹²¹ Australia's Natural Resources are "In Safe Hands," Department of Agriculture, Fisheries and Forestry (Canberra) 23 November 2012. Date of Access: 5 January 2013.

http://www.daff.gov.au/ludwig/media office/media releases/media releases/2012/november/in-safehands.

² Australia's Natural Resources are "In Safe Hands," Department of Agriculture, Fisheries and Forestry (Canberra) 23 November 2012. Date of Access: 5 January 2013.

http://www.daff.gov.au/ludwig/media office/media releases/media releases/2012/november/in-safehands.

²¹²³ Major Review of Australian Fisheries Management, Department of Agriculture, Fisheries and Forestry (Canberra) 11 September 2012. Date of Access: 5 January 2013.

http://www.daff.gov.au/ludwig/media office/media releases/media releases/2012/september/maiorreview-of-australian-fisheries-management. ²¹²⁴ Major Review of Australian Fisheries Management, Department of Agriculture, Fisheries and Forestry

http://newswatch.nationalgeographic.com/2012/12/28/a-groundbreaking-agreement-to-save-australiasailing-murray-river/.

²¹²⁶ National Biodiversity Investment Prospectus Launched, Invest in Australia (Sydney) 11 December 2012. Date of Access: 5 January 2012.

http://www.investinaustralia.com/news/national-biodiversity-investment-prospectus-launched-12c3.

Moreover, on 20 December 2012, Australia's Environment Minister Tony Burke launched the government's first wave of climate change-related funding for the country's natural resource management organizations.²¹²⁹

On 29 June 2012, Government of Australia announced its intentions to change the eligibility requirements for its conservation tillage offset.²¹³⁰ Eligibility requirements for the refundable tax offset have been simplified regarding the purchase of a new eligible no-till seeder, rendering the offset more accessible. Assistant Treasurer David Bradbury has noted, "This is a small but important change that will assist the Government's objective of encouraging the uptake of conservation tillage practices."²¹³¹

However, Government of Australia has terminated some agricultural programmes that would have been in service to the commitment. For example, on 30 June 2012, Australia's Climate Change Adjustment Program was closed. Its purpose was to assist "primary producers to manage the impacts of climate change by helping them to access farm business and management advice."²¹³² Adjustment advice, training, and other services were available to eligible producers who were adversely affected by climate change.²¹³³ Furthermore, the Transitional Income Support, which provided assistance to farm families in financial difficulty to manage the impacts of climate change, also closed on 30 June 2012.²¹³⁴

In order to compensate for these closures, the "Rural Financial Counselling Service Program" continues to offer free financial counselling to primary producers, fishers, and some eligible small rural businesses suffering financial hardship as a result of climate change.²¹³⁵

On 5-6 March 2013, Canberra hosted the Australian Bureau of Agricultural and Resource Economics and Sciences' (ABARES) Outlook 2013 conference, on the theme "Future Food, Future Farming." According to ABARES' Executive Director, Mr. Paul Morris, the conference provided "a unique opportunity for a 360 degree examination of the issues faced by the

²¹²⁹ Regions Given Climate Change Help, Sky News (Sydney) 20 December 2012. Date of Access: 5 January 2013.

http://www.skynews.com.au/eco/article.aspx?id=828549.

²¹³⁰ Reforms to Conservation Tillage Offset, Assistant Treasurer Minister Assisting for Deregulation (29 June 2012). Date of Access: 5 January 2013.

http://assistant.treasurer.gov.au/DisplayDocs.aspx?doc=pressreleases/2012/058.htm&pageID=003&min=dj ba&Year=&DocType. ²¹³¹ Reforms to Conservation Tillage Offset, Assistant Treasurer Minister Assisting for Deregulation (29

²¹³¹ Reforms to Conservation Tillage Offset, Assistant Treasurer Minister Assisting for Deregulation (29 June 2012). Date of Access: 5 January 2013.

http://assistant.treasurer.gov.au/DisplayDocs.aspx?doc=pressreleases/2012/058.htm&pageID=003&min=dj ba&Year=&DocType.

²¹³² Climate Change Adjustment, Department of Agriculture, Fisheries and Forestry (Canberra) 31 July 2012. Date of Access: 5 January 2013.

http://www.daff.gov.au/climatechange/australias-farming-future/climate-change-adjustment-assistance. ²¹³³ Climate Change Adjustment, Department of Agriculture, Fisheries and Forestry (Canberra) 31 July 2012. Date of Access: 5 January 2013.

http://www.daff.gov.au/climatechange/australias-farming-future/climate-change-adjustment-assistance. ²¹³⁴ Climate Change Adjustment, Department of Agriculture, Fisheries and Forestry (Canberra) 31 July 2012. Date of Access: 5 January 2013.

http://www.daff.gov.au/climatechange/australias-farming-future/climate-change-adjustment-assistance.

²¹³⁵ Climate Change Adjustment, Department of Agriculture, Fisheries and Forestry (Canberra) 31 July 2012. Date of Access: 5 January 2013.

http://www.daff.gov.au/climatechange/australias-farming-future/climate-change-adjustment-assistance.

agricultural, forestry, fisheries, and food sectors in Australia.²¹³⁶ Main sessions included discussions on farm performance, regional development, emerging markets and carbon farming, alongside forums dedicated to each of Australia's key commodity sectors.²¹³⁷ On 6 March 2013, the conference highlighted the important role of farmers in tackling climate change, particularly with regards to the Australian government's Carbon Farming Initiatives.²¹³⁸

In addition to this plenary conference, ABARES held Regional Outlook conferences in each state and the Northern Territory, "taking its agricultural commodity forecasts and discussions on key issues affecting rural industries to regional communities."²¹³⁹ These regional conferences focused on opportunities for agriculture, regional industries, and environmental change. The Hobart Regional Outlook conference (Tasmania) took place on 1 May 2013; the Cardinia conference (Victoria) took place on 1-2 May 2013; and the Townsville conference (Queensland) took place on 12 June 2013.

On 9 April 2013, ABARES commenced a survey which seeks to help the vegetable growing industry plan for the future with a focus on sustainability. Mr. Morris stated: "This survey will collect information about production, financial performance and socio-economic characteristics of vegetable growing farms, which will help us better understand how the industry is developing over time."²¹⁴⁰

In March 2012, Minister for Agriculture, Fisheries and Forestry Joe Ludwig announced two separate but coordinated reviews of the Commonwealth Harvest Strategy Policy and the Commonwealth Bycatch Policy. On 27 May 2013, the Department of Agriculture, Fisheries and Forestry released two reports on these policy reviews, noting that, "the policy and guidelines meet or exceed the standards of relevant international obligations and continue to represent best practice." ²¹⁴¹ A key outcome of the Commonwealth Bycatch Policy review was a recommendation for new objectives and principles to enhance sustainability.²¹⁴²

Thus, Australia has been awarded a score of +1 for its funding, development, promotion, and implementation of sustainable agricultural practices and increased attention to fisheries and waterways management.

Lead Analyst: Samantha Young

²¹³⁶ Premier Agricultural Event Draws Australian, International Experts (Canberra) 11 February 2013. Date of Access: 24 June 2013.

http://www.daff.gov.au/abares/media-releases/2013/premier-agricultural-event.

²¹³⁷ Premier Agricultural Event Draws Australian, International Experts (Canberra) 11 February 2013. Date of Access: 24 June 2013.

http://www.daff.gov.au/abares/media-releases/2013/premier-agricultural-event.

²¹³⁸ Opportunities and Challenges in Carbon Farming (Canberra) 6 March 2013. Date of Access: 24 June 2013. <u>http://www.daff.gov.au/abares/media-releases/2013/opportunities-and-challenges-in-carbon-farming</u>.

 ²¹³⁹ ABARES Regional Outlook Conference (Canberra) 19 April 2013. Date of Access: 24 June 2013.
<u>http://www.daff.gov.au/abares/media-releases/2013/abares-regional-outlook-conference-cardinia-victoria.</u>

²¹⁴⁰ Future Planning for our \$3bn Vegetable Growing Farms (Canberra) 9 April 2013. Date of Access: 24 June 2013. http://www.daff.gov.au/abares/media-releases/2013/vegetable-growing.

²¹⁴¹ Commonwealth Harvest Strategy Policy and Bycatch Policy Reviews Reports Released (Canberra) 27 May 2013. <u>http://www.daff.gov.au/about/media-centre/dept-releases/2013/commonwealth-harvest-</u> strategy-policy-and-bycatch-policy-reviews-reports-released.

²¹⁴² Commonwealth Harvest Strategy Policy and Bycatch Policy Reviews Reports Released (Canberra) 27 May 2013. <u>http://www.daff.gov.au/about/media-centre/dept-releases/2013/commonwealth-harvest-</u> strategy-policy-and-bycatch-policy-reviews-reports-released.

Brazil: +1

Brazil has fully complied with its commitment to foster the development and greater use of technologies, practices, and techniques to improve the efficiency of water and soil use in a sustainable manner.

On 29 January 2013, the Ministry of Agriculture, Livestock and Supply announced the Project Recovery of Degraded Areas of the Amazon, launched in partnership with the United Nations Food and Agriculture Organization. The project will aim to recover productive areas degraded in the arc of deforestation in the Amazon by promoting alternative sustainable agriculture production and good agricultural practices.²¹⁴³

On 19 January 2013, Brazil participated in the 5th Berlin Agriculture Minister's Summit.²¹⁴⁴ The Brazilian delegation joined the Summit's participants in a call to increase capital investments to develop a sustainable agri-food industry, especially in developing countries.²¹⁴⁵

On 20 November 2012, the Brazilian government officially installed the National Commission for Agroecology and Organic Production (CNAPO), which is responsible for the development of the country's new Agroecology and Organic Production Policy.²¹⁴⁶

On 20 December 2012, the Brazilian Ministry of Agriculture, Livestock, and Supply (MAPA) announced initiatives to increase the production and consumption of organic products. The Ministry will contribute BRL3.4 million to the National Council for Scientific and Technological Development (CNPq) to expand a federal network of technical education and development in agroecology and organic farming.²¹⁴⁷

President Dilma Rousseff and MAPA Minister Mendes Ribeiro Filho launched the Agricultural and Livestock Plan 2012/2013 on 28 June 2012. The plan will allot BRL3.4 billion in 2012-2013 to the Low Carbon Agriculture Program (ABC).²¹⁴⁸ The ABC program aims to reduce carbon

http://www.bmelv.de/SharedDocs/Pressemitteilungen/EN/2013/0022-Internationaler-

²¹⁴³ Project Will Promote Recovery of Degraded Productive Area, Ministry of Agriculture, Livestock and Supply (Brasilia) 28 January 2013. Date of Access: 13 February 2013.

http://www.agricultura.gov.br/comunicacao/noticias/2013/01/projeto-vai-promover-recuperacao-de-areaprodutiva-degradada. ²¹⁴⁴ Participating countries of the Berlin Agriculture Ministers' Summit 2013, Federal Ministry of Food,

Agriculture and Consumer Protection (Bonn) 19 January 2013. Date of Access: 8 February 2013. http://www.bmelv.de/SharedDocs/Downloads/Ministerium/Veranstaltungen/GFFA2013/participating_coun tries Agrarministergipfel2013 EN.pdf? blob=publicationFile.

²¹⁴⁵ Berlin Agriculture Ministers' Summit 80 countries commit themselves to a resolute fight against hunger, Federal Ministry of Food, Agriculture and Consumer Protection (Bonn) 19 January 2013. Date of Access: 8 February 2013.

Agrarministergipfel.html. ²¹⁴⁶ Commission Instituted Agroecology and Organic Production, Ministry of Agriculture, Livestock and Supply (Brasilia) 20 November 2012. Date of Access: 6 January 2013. http://www.agricultura.gov.br/comunicacao/noticias/2012/11/instituida-comissao-de-agroecologia-e-

producao-organica. ²¹⁴⁷ Map Invests in Expanding Production System Based Agroecological, Ministry of Agriculture, Livestock and Supply (Brasilia) 20 December 2012. Date of Access: 6 January 2013. http://www.agricultura.gov.br/comunicacao/noticias/2012/12/mapa-investe-na-expansao-do-sistemaprodutivo-de-base-agroecologica. ²¹⁴⁸ Rio Grande do Sul Enables Technicians to Divulge ABC Plan, Ministry of Agriculture, Livestock and

Supply (Brasilia) 20 November 2012. Date of Access: 6 January 2013.

emissions in the agricultural sector and promote the adoption of sustainable agricultural techniques. Among the techniques funded by the program are no-tillage systems, forest planting and maintenance, soil conservation, and recovery of degraded farmland.²¹⁴⁹ As of 28 June 2013, the plan had led to a 555 per cent increase in the adoption of sustainable agricultural techniques.²¹⁵⁰

On 30 April 2013, Brazilian President Dilma Rousseff signed into law the National Policy for Crop-Livestock-Forest. The act provides for the recovery of degraded areas and deforestation reduction by extending lines of credit and technical assistance to farmers who adopt systems for the preservation and improvement of soil properties. The law will enter into force 180 days after its publication.²¹⁵¹

On 17 June 2013, Minister of Agriculture, Livestock and Supply Antonio Andrade authorized the creation of a working group in the Department of Livestock Development and Cooperatives to propose and structure the sustainable development of irrigation and agricultural drainage activities. The group will organize a special team to explore alternatives which encourage the private sector to expand areas of irrigation and agricultural drainage in a sustainable manner.²¹⁵²

Thus, for its development and implementation of sustainable agriculture policies, initiatives, and programs with a goal of adaption to the effects of climate change, Brazil has been awarded a score of +1.

Analyst: Bianca Vong

Canada: +1

Canada has fully complied with its commitment to improve the efficiency of water and soil use in a sustainable manner through the development and implementation of available technologies, well-known practices, and techniques such as soil fertility enhancement, minimum tillage, and agroforestry.

On 18 December 2012, the Canadian government announced it would invest more than CAD850 thousand to finance seven projects, led by Grain Farmers of Ontario, that would allow grain producers to implement soil management practices that could increase their yields and make

http://www.agricultura.gov.br/comunicacao/noticias/2012/11/rio-grande-do-sul-capacita-tecnicos-para-

divulgar-plano-abc. ²¹⁴⁹ Government Provides More Resources For Sustainable Production, Ministry of Agriculture, Livestock and Supply (Brasilia) 28 June 2012. Date of Access: 6 January 2013.

http://www.agricultura.gov.br/politica-agricola/noticias/2012/06/governo-disponibiliza-mais-recursos-paraproducao-sustentavel.

Contracts by the ABC program up 80%, Ministry of Agriculture, Livestock and Supply (Brasilia) 28 June 2013. Date of Access: 4 July 2013.

http://www.agricultura.gov.br/comunicacao/noticias/2013/06/contratos-pelo-programa-abc-chegam-a-80porcento.

Política de Integração Lavoura-Pecuária-Floresta é aprovada. Ministry of Agriculture, Livestock and Supply (Brasilia) 30 April 2013. Date of Access: 4 July 2013.

http://www.agricultura.gov.br/comunicacao/noticias/2013/04/politica-de-integracao-lavoura-pecuariafloresta-e-aprovada.

²¹⁵² Working Group will study alternatives to encourage irrigated agriculture and agricultural draiage, Ministry of Agriculture, Livestock and Supply (Brasilia) 17 June 2013. Date of Access: 4 July 2013. http://www.agricultura.gov.br/comunicacao/noticias/2013/06/grupo-trabalho-ira-estudar-alternativas-deincentivo-a-agricultura-irrigada-e-drenagem-agricola.

crops more sustainable. The investment is also directed towards helping producers develop new seed varieties with improved disease resistance and higher protein content.²¹⁵³

On 7 December 2012, Gerry Ritz, the Canadian minister of Agriculture and Agri-Food, announced the details of Canada's new agricultural policy framework, "Growing Forward 2."

The three new programs under the framework are intended to streamline investments in the agriculture and agri-food sector, focusing on innovation, competitiveness, and market development.²¹⁵⁴ One of these programs — the AgriInnovation Program — will begin in April 2013 and run for five years. This program will receive funding of up to CAD468 million and "is designed to accelerate the pace of innovation by supporting research and development activities in agri-innovations and facilitating the demonstration, commercialization, and/or adoption of innovative products, technologies, processes, practices, and services" with an aim to increase the adaptability and sustainability of Canadian agriculture.²¹⁵⁵

On 7 January 2013, Canadian Agriculture Minister Gerry Ritz and Ontario Minister of Agriculture, Food and Rural Affairs Ted McMeekin announced that Governments of Canada and Ontario were making a joint investment of up to CAD2.5 million to help producers adopt innovative and sustainable on-farm water management practices.²¹⁵⁶ This initiative is designed to facilitate the development of innovative technologies and solutions to water conservation and water use efficiency problems for Ontario farmers.²¹⁵⁷

On 3 May 2013, Minister Ritz and Saskatchewan Agriculture Minister Lyle Stewart announced CAD65 million over five years for the Farm and Ranch Water Infrastructure Program.²¹⁵⁸ This program is aimed at establishing secure water sources for Saskatchewan's farmers and ranchers by investing in farm and ranch water infrastructure such as wells, dugouts, pipelines, and irrigation infill.²¹⁵⁹

Thus, for its efforts towards improving the sustainability of the country's agriculture sector, Canada receives a score of +1.

http://www.agr.gc.ca/cb/index_e.php?s1=n&s2=2012&page=n121207.

http://www.agr.gc.ca/cb/index_e.php?s1=n&s2=2013&page=n130107.

http://www.agr.gc.ca/cb/index_e.php?s1=n&s2=2013&page=n130107.

http://www.gov.sk.ca/news?newsId=17cfbc0c-c0bb-422a-a2de-3690c83ab04a.

²¹⁵³ Harper Government Helps Grain Farmers Grow Stronger, Agriculture and Agri-Food Canada (Ottawa)18 December 2012. Date of Access: 5 January 2013.

http://www.agr.gc.ca/cb/index_e.php?s1=n&s2=2012&page=n121218.

²¹⁵⁴ Harper Government Announces Federal Growing Forward 2 Programs, Agriculture and Agri-Food Canada (Ottawa) 7 December 2012. Date of Access: 5 January 2013.

²¹⁵⁵ AgriInnovation Program, Agriculture and Agri-Food Canada (Ottawa) 7 December 2012. Date of Access: 5 January 2013.

http://www4.agr.gc.ca/AAFC-AAC/display-afficher.do?id=1354301302625&lang=eng.

²¹⁵⁶ Governments Help Ontario Farmers Find Sustainable Water Management Solution, Agriculture and Agri-Food Canada (Ottawa) 7 January 2013. Date of Access: 25 June 2013.

²¹⁵⁷ Governments Help Ontario Farmers Find Sustainable Water Management Solution, Agriculture and Agri-Food Canada (Ottawa) 7 January 2013. Date of Access: 25 June 2013.

²¹⁵⁸ Canada and Saskatchewan Invest In Farm and Ranch Water Infrastructure Program, Government of Saskatchewan (Regina) 3 May 2013. Date of Access: 25 June 2013.

http://www.gov.sk.ca/news?newsId=17cfbc0c-c0bb-422a-a2de-3690c83ab04a.

²¹⁵⁹ Canada and Saskatchewan Invest In Farm and Ranch Water Infrastructure Program, Government of Saskatchewan (Regina) 3 May 2013. Date of Access: 25 June 2013.

China: -1

China failed to comply with its commitment to improve the efficiency of water and soil use in a sustainable manner through the development and implementation of available technologies, practices, and techniques.

In January 2013, China participated in the 5th Berlin Agriculture Minister's Summit.²¹⁶⁰ The Chinese delegation joined the Summit's participants in a call to increase capital investments to develop a sustainable agri-food industry, especially in developing countries.²¹⁶¹

On 31 October 2012, the State Council pledged to launch a national program on soil protection, with the goal of protecting the soil of cultivated land and drinking water by monitoring and controlling pollutant risks, rehabilitating polluted soil, and improving mechanisms for monitoring soil environment.²¹⁶²

Furthermore, the Facilitating Reforestation for Guangxi Watershed Management in the Pearl River Basin Project has recently reforested three thousand hectares of land in southwest Guangxi. The project will control soil and water erosion, restore degraded land, and preserve biodiversity in the area.²¹⁶³

However, no current programs for the development and implementation of technologies, practices, and techniques to improve the efficiency of water and soil use in a sustainable manner were found.

In June 2013, the Chinese government announced it would conduct a nationwide sampling of soil in order to map pollution levels across the country. However, it did not announce a date for the completion of the survey or whether the results would be made public.²¹⁶⁴

Despite China's promised support of sustainable agriculture and expressed intent to launch a national program on soil protection, the current lack of development and implementation of such programs warrants a score of -1.

Analyst: Bianca Vong

http://www.chinadaily.com.cn/china/2012-10/31/content 15862217.htm.

²¹⁶⁰ Participating countries of the Berlin Agriculture Ministers' Summit 2013, Federal Ministry of Food, Agriculture and Consumer Protection (Bonn) 19 January 2013. Date of Access: 8 February 2013.

http://www.bmelv.de/SharedDocs/Downloads/Ministerium/Veranstaltungen/GFFA2013/participating_coun tries Agrarministergipfel2013 EN.pdf? blob=publicationFile.

²¹⁶¹ Berlin Agriculture Ministers' Summit 80 countries commit themselves to a resolute fight against hunger, Federal Ministry of Food, Agriculture and Consumer Protection (Bonn) 19 January 2013. Date of Access: 8 February 2013.

http://www.bmelv.de/SharedDocs/Pressemitteilungen/EN/2013/0022-Internationaler-

Agrarministergipfel.html. ²¹⁶² China Vows to Curb Soil Pollution, China Daily (Beijing) 31 October 2012. Date of Access: 5 January 2013.

²¹⁶³ Reforestation Pilot in China is Earning Carbon Credits, World Bank (Washington) 27 December 2012. Date of Access: 5 January 2013.

http://www.worldbank.org/en/news/2012/12/28/reforestation-pilot-in-china-is-earning-carbon-credits. ²¹⁶⁴ China to Survey Soil Amid Fears Over Rice, Wall Street Journal (Beijing) 12 June 2013. Date of

Access: 4 July 2013.

http://online.wsj.com/article/SB10001424127887324049504578541373217674356.html.

France: +1

France has fully complied with its commitment to promote environmentally sustainable agricultural methods.

On 19 January 2013, France participated in the 5th Berlin Agriculture Minister's Summit.²¹⁶⁵ The French delegation joined the Summit's participants in a call to increase capital investments to develop a sustainable agri-food industry, especially in developing countries.²¹⁶⁶

On 18 December 2012, France's Ministry of Agriculture held a conference in Paris to discuss their new project "Agricultures Produisons Autrement." During the conference, the French Minister of Agriculture, Stephane le Foll, affirmed France's goal to become a "leader in agro-ecology in Europe."²¹⁶⁷

The French Ministry of Agriculture established that the goals of this program are to: (1) gather, organize, and complete agro-ecological knowledge; (2) provide training and technical support; (3) "individually and collectively encourage farmers to convert their practices and maintain these changes over time."²¹⁶⁸

In pursuit of these objectives, the Ministry of Agriculture has stated that it will allocate EUR3 million to agro-ecological development projects in 2013. The French Government also intends to provide incentives to farmers with tax breaks, and redirect Collective Agricultural Plan (CAP) money to fund individual agro-ecological initiatives.²¹⁶⁹

From 9 October 2012 to 6 January 2013, France's Ministry of Agriculture, Food and Forestry sustained a public advertising campaign supporting their Ecophyto program. The advertising campaign, which included print, web, and television media, encouraged agricultural professionals to reduce pesticide use.²¹⁷⁰

http://www.bmelv.de/SharedDocs/Pressemitteilungen/EN/2013/0022-Internationaler-Agrarministergipfel.html.

²¹⁶⁵ Participating countries of the Berlin Agriculture Ministers' Summit 2013, Federal Ministry of Food, Agriculture and Consumer Protection (Bonn) 19 January 2013. Date of Access: 8 February 2013. <u>http://www.bmelv.de/SharedDocs/Downloads/Ministerium/Veranstaltungen/GFFA2013/participating_countries_Agraministergipfel2013_EN.pdf?__blob=publicationFile</u>.

²¹⁶⁶ Berlin Agriculture Ministers' Summit 80 countries commit themselves to a resolute fight against hunger, Federal Ministry of Food, Agriculture and Consumer Protection (Bonn) 19 January 2013. Date of Access: 8 February 2013.

²¹⁶⁷ Stéphane Le Foll Veut Faire de la France le Leader Européen de l'Agroécologie, La France Agricole (Paris) 18 December 2012. Date of Access: 5 January 2013.

http://www.lafranceagricole.fr/actualite-agricole/modeles-de-production-stephane-le-foll-veut-faire-de-lafrance-le-leader-europeen-de-l-agroecologie-66153.html.

²¹⁶⁸ Conférence Nationale: Stéphane Le Foll Présente Son Projet Agro-écologique, Ministère de l'Agriculture, de l'Agroalimentaire et de la Forêt (Paris) 18 December 2012. Date of Access: 5 January 2013. <u>http://agriculture.gouv.fr/Conference-nationale-Stephane-Le.</u>

²¹⁶⁹ Conférence Nationale: Stéphane Le Foll Présente Son Projet Agro-écologique, Ministère de l'Agriculture, de l'Agroalimentaire et de la Forêt (Paris) 18 December 2012. Date of Access: 5 January 2013. <u>http://agriculture.gouv.fr/Conference-nationale-Stephane-Le.</u>

²¹⁷⁰ Moins de Pesticides, Lancement de la Première Campagne TV, Ministère de l'Agriculture, de l'Agroalimentaire et de la Forêt (Paris) 29 October 2012. Date of Access: 29 June 2013. http://agriculture.gouv.fr/campagne-ecophyto.

On 13 May 2013, the Ministry of Agriculture, Food and Forestry launched a call for projects that would help mobilize the agro-ecology movement. Pledging EUR2.5 million, the Ministry looked to support projects that established efficient and innovative farming techniques.²¹⁷¹

During the discussions of the Common Agricultural Policy (CAP) reform of the European Union, France consistently upheld environmentally-friendly techniques as a priority during negotiations.²¹⁷²

Thus, for its efforts to enhance sustainable agriculture in the face of climate change, France receives a score of +1.

Analyst: Mary Davidson

Germany: 0

Germany has taken steps to improve the efficiency of water and soil use through the development of sustainable practices. However, Germany is yet to commence the implementation of such practices.

On 16 May 2013, the BMELV announced that Germany has joined the international multiannual research initiative to sustainably produce higher-yielding wheat.²¹⁷³ Climate change challenges have put stress on agriculture, yet the food demand is growing. Global cooperation is taking place to cultivate more efficient wheat varieties, and Germany is actively engaged.

During the discussions of the Common Agricultural Policy (CAP) — passed on 26 June 2013 — reform of the European Union, Germany has repeated spoken in support of environment-friendly agricultural practices.²¹⁷⁴

On 28 January 2013, Federal Minister of Food, Agriculture and Consumer Protection Ilse Aigner and Co-Chair of the Bill and Melinda Gates Foundation shared their vision of the importance of agricultural research in the fight against world hunger.²¹⁷⁵ Minister Aigner spoke of the significance of development of agriculture in the developing countries: "Responsible investments

²¹⁷¹ Stéphane Le Foll Lance un Appel à Projets "Mobilisation Collective Pour l'Agro-écologie," Ministère de l'Agriculture, de l'Agroalimentaire et de la Forêt (Paris) 15 May 2013. Date of Access: 29 June 2013. <u>http://agriculture.gouv.fr/Stephane-LE-FOLL-lance-un-appel-a.</u>

²¹⁷² Accord sur les Perspectives Financières de l'UE : Un Budget de la PAC Préservé pour les Agriculteurs Français, Ministère de l'Agriculture, de l'Agroalimentaire et de la Forêt (Paris) 8 February 2013. Date of Access: 29 June 2013.

http://agriculture.gouv.fr/Accord-sur-les-perspectives.

²¹⁷³ Press release No. 146 from 16.05.13: New strategies for higher-yielding wheat, Federal Ministry of Food, Agriculture and Consumer Protection (Bonn) 16 May 2013. Date of Access: 23 July 2013 http://www.bmelv.de/SharedDocs/Pressemitteilungen/EN/2013/146-Neue-Strategien-fuer-ertragreicheren-Weizen.html

 ²¹⁷⁴ Press release No. 47 from 08.02.13: Aigner: "The agreement on the new EU financial framework until
2020 is a solid foundation for ambitious improvements to the Common Agricultural Policy", Federal
Ministry of Food, Agriculture and Consumer Protection (Bonn) 8 Feburary 2013. Date of Access: 23 July
2013

http://www.bmelv.de/SharedDocs/Pressemitteilungen/EN/2013/047-AI-Einigung-EU-Haushalt.html. ²¹⁷⁵ Press release no. 38 from 28.01.13: Aigner and Gates talk about a world without hunger, Federal

Ministry of Food, Agriculture and Consumer Protection (Bonn) 28 January 2013. Date of Access: 8 February 2013.

http://www.bmelv.de/SharedDocs/Pressemitteilungen/EN/2013/038-AI-Gates.html.

in agriculture and agricultural research that is tailored to the needs of developing countries are key factors in the fight against hunger and poverty." Minister Aigner meeting with Mr. Gates aligned with the 5th International Agriculture Ministers' Summit in Berlin, initiated and chaired by Minister Aigner.²¹⁷⁶ Upon the conclusion of the Summit, delegations from 80 countries²¹⁷⁷ united in their call to increase capital investments to develop a sustainable agri-food industry, especially in developing countries.

On 6 December 2012, Minister Ilse Aigner signed an intergovernmental agreement on scientifictechnical cooperation in agricultural and food research Israel's Minister of Agriculture Orit Noked.²¹⁷⁸ The agreement is meant to bring together the research platforms of the two countries in joint projects addressing the global food situation. The points of emphasis are: (1) adaptation of agriculture to climate change, (2) drought and stress tolerance of wheat, and (3) more efficient irrigation practices.

On 9 November 2012, the Federal Ministry of Food, Agriculture and Consumer Protection (BMELV) released a brochure outlining the Ministry's primary areas of work and policy goals. In the brochure, the BMELV described its ongoing efforts to "encourage sustainable forest management" and explained that "[its] aim is to create optimal conditions to enable the German agricultural industry to be modern, multifunctional and innovative."²¹⁷⁹

On 20 November 2012, at the Global Soil Week hosted in Berlin, Gudrun Kopp, Parliamentary State Secretary to the Federal Minister for Economic Cooperation and Development (BMZ), emphasized the increasing significance of soil conservation: "We urgently need to prevent further loss of the limited resource of fertile soil."²¹⁸⁰ Speaking of Germany's efforts to promote soil conservation and rehabilitation internationally, Parliamentary State Secretary said that "[...] it is important that people throughout the world develop an awareness of the value of land and of the dangers of not managing land in a sustainable way."

Germany has taken actions to enhance the development of efficient soil and water use technologies through the international exchange of experience. However, Germany is yet to translate the new developments into practices. Thus Germany is awarded a score of 0.

²¹⁷⁶ Press release no. 22 from 19.01.13: Berlin Agriculture Ministers' Summit 80 countries commit themselves to a resolute fight against hunger, Federal Ministry of Food, Agriculture and Consumer Protection (Bonn) 19 January 2013. Date of Access: 8 February 2013.

http://www.bmelv.de/SharedDocs/Pressemitteilungen/EN/2013/0022-Internationaler-Agrarministergipfel.html.

²¹⁷⁷ Participating countries of the Berlin Agriculture Ministers' Summit 2013, Federal Ministry of Food, Agriculture and Consumer Protection (Bonn) 19 January 2013. Date of Access: 8 February 2013. <u>http://www.bmelv.de/SharedDocs/Downloads/Ministerium/Veranstaltungen/GFFA2013/participating_coun</u> tries Agrarministergipfel2013 EN.pdf? blob=publicationFile.

²¹⁷⁸ Press release No. 374 from 06.12.12: Germany and Israel intensify cooperation in agricultural research and rural development, Federal Ministry of Food, Agriculture and Consumer Protection (Bonn) 6 December 2012. Date of Access: 11 January 2013.

http://www.bmelv.de/SharedDocs/Pressemitteilungen/EN/2012/374-Zusammenarbeit-mit-Israel.html. ²¹⁷⁹ The BEMLV, Federal Ministry of Food, Agriculture and Consumer Protection (Bonn) 9 November

^{2012.} Date of Access: 11 January 2013. http://www.bmelv.de/SharedDocs/Downloads/EN/Publications/Self-Portrait.pdf?__blob=publicationFile.

 ²¹⁸⁰ Press Releases: Global Soil Week, Federal Ministry of Economic Cooperation and Development (Bonn) 20 November 2012. Date of Access: 11 January 2013.

http://www.bmz.de/en/press/aktuelleMeldungen/2012/November/20121120_pm_276_boeden/index.html.

India: 0

India partially complied with its commitment to support the development and a greater use of available technologies, well-known practices, and techniques such as soil fertility enhancement, minimum tillage, and agroforestry.

In January 2013, India participated in the 5th Berlin Agriculture Minister's Summit.²¹⁸¹ The Indian delegation joined the Summit's participants in a call to increase capital investments to develop a sustainable agri-food industry, especially in developing countries.²¹⁸²

On 21 December 2012, the Planning Commission of the Government of India released a draft of the country's Twelfth Five Year Plan (2012-2017) that renewed federal funding for Rashtriya Krishi Vikas Yojana (RKVY) — the National Agriculture Development Scheme — in the amount of INR632.46 billion over five years.²¹⁸³

RKVY is a Central Assistance scheme created under the country's Eleventh Five Year Plan "to incentivise States to draw up plans for their agriculture sector more comprehensively, taking agro-climatic conditions, natural resource issues and technology into account, and integrating livestock, poultry and fisheries more fully."²¹⁸⁴ The scheme provides assistance for activities in defined areas of focus that include enhancement of soil health, skill development and training among farmers, and scaling up micro-irrigation systems.²¹⁸⁵

The Twelfth Five Year Plan also highlights the importance of sustainable agriculture in its chapter on Sustainable Development: "The major thrust of the agricultural development programmes is on improving the efficiency and use of scarce natural resources, namely, land, water, and energy."²¹⁸⁶

²¹⁸¹ Participating countries of the Berlin Agriculture Ministers' Summit 2013, Federal Ministry of Food, Agriculture and Consumer Protection (Bonn) 19 January 2013. Date of Access: 8 February 2013. http://www.bmelv.de/SharedDocs/Downloads/Ministerium/Veranstaltungen/GFFA2013/participating_countries Agraministergipfel2013 EN.pdf? blob=publicationFile.

²¹⁸² Press release no. 22 from 19.01.13: Berlin Agriculture Ministers' Summit 80 countries commit themselves to a resolute fight against hunger, Federal Ministry of Food, Agriculture and Consumer Protection (Bonn) 19 January 2013. Date of Access: 8 February 2013.

http://www.bmelv.de/SharedDocs/Pressemitteilungen/EN/2013/0022-Internationaler-Agrarministergipfel.html.

²¹⁸³ Twelfth Five Year Plan (2012-2017) Volume 1: Faster, More Inclusive, and Sustainable Growth, Planning Commission of the Government of India (New Delhi) 21 December 2012. Date of Access: 4 January 2013.

http://planningcommission.gov.in/plans/planrel/12thplan/welcome.html.

²¹⁸⁴ About RKVY: Vision/Mission, Department of Agriculture and Cooperation at the Ministry of Agriculture (New Delhi) 2009. Date of Access: 4 January 2013. http://rkvy.nic.in/Index.html.

²¹⁸⁵ Guidelines & Amendments: Areas of Focus under the RKVY, Department of Agriculture and Cooperation at the Ministry of Agriculture (New Delhi) 2009. Date of Access: 4 January 2013. http://rkvy.nic.in/Index.html.

²¹⁸⁶ Twelfth Five Year Plan (2012-2017) Volume 1: Faster, More Inclusive, and Sustainable Growth, Planning Commission of the Government of India (New Delhi) 21 December 2012. Date of Access: 4 January 2013.

On 13 May 2013, the Department released Administrative Approval of RKVY for 2013-14 totalling INR99.54 billion, including INR98.5446 billion of grants to state governments and INR995.4 million towards Crop Husbandry.²¹⁸⁷

India's renewed financial commitment to the RKVY warrants a score of 0.

Analyst: Erin Singer

Indonesia: +1

Indonesia has fully complied with its commitment to support the development and greater use of available technologies, well-known practices, and techniques such as soil fertility enhancement, minimum tillage, and agroforestry.

On 19 January 2013, Indonesia participated in the 5th Berlin Agriculture Minister's Summit.²¹⁸⁸ The Indonesian delegation joined the Summit's participants in a call to increase capital investments to develop a sustainable agri-food industry, especially in developing countries.²¹⁸⁹

On 2 August 2012, the Board of Directors of the World Bank approved a USD80 million loan to the Republic of Indonesia for the country's Sustainable Management of Agricultural Research and Dissemination (SMARTD) project.²¹⁹⁰ The project aims to "improve the institutional capacity and performance of the Indonesian Agency for Agricultural Research and Development (IAARD) to develop and disseminate relevant and demand-driven innovative technologies, meeting the needs of producers and of the agri-food system."²¹⁹¹

http://www-

http://planningcommission.gov.in/plans/planrel/12thplan/welcome.html.

²¹⁸⁷ Letter No. 5-1/2013-RKVY: Administrative Approval 2013-14, Department of Agriculture & Cooperation (New Delhi) 13 May 2013. Date of Access: 29 June 2013.

http://rkvy.nic.in/Letter%20Circulars/Adminstrative%20Approval%202013-14.PDF.

 ²¹⁸⁸ Participating countries of the Berlin Agriculture Ministers' Summit 2013, Federal Ministry of Food, Agriculture and Consumer Protection (Bonn) 19 January 2013. Date of Access: 8 February 2013.
<u>http://www.bmelv.de/SharedDocs/Downloads/Ministerium/Veranstaltungen/GFFA2013/participating_countries_Agraministergipfel2013_EN.pdf?_blob=publicationFile</u>.
²¹⁸⁹ Press release no. 22 from 19.01.13: Berlin Agriculture Ministers' Summit 80 countries commit

²¹⁸⁹ Press release no. 22 from 19.01.13: Berlin Agriculture Ministers' Summit 80 countries commit themselves to a resolute fight against hunger, Federal Ministry of Food, Agriculture and Consumer Protection (Bonn) 19 January 2013. Date of Access: 8 February 2013.

http://www.bmelv.de/SharedDocs/Pressemitteilungen/EN/2013/0022-Internationaler-Agrarministergipfel.html.

²¹⁹⁰ Implementation Status & Results: Indonesia Sustainable Management of Agricultural Research and Technology Dissemination (SMARTD), World Bank (Washington) 24 November 2012. Date of Access: 5 January 2013.

wds.worldbank.org/external/default/WDSContentServer/WDSP/EAP/2012/11/24/090224b0817a0360/1_0/ Rendered/PDF/Indonesia000Su0Report000Sequence001.pdf

²¹⁹¹ Project Appraisal Document on a Proposed Loan in the Amount of USD\$80.0 Million to the Republic of Indonesia for the Sustainable Management of Agricultural Research and Technology Dissemination (SMARTD) Project, World Bank (Washington) 1 July 2012. Date of Access: 5 January 2013. http://www-

wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2012/07/17/000356161_201207170042 53/Rendered/PDF/643060PAD0P1170only0900R20120015501.pdf.

Currently, including both public and private sector spending, Indonesia spends 0.27 per cent of its GDP on agricultural research.²¹⁹²

In November 2012, the Partnership for Indonesia Sustainable Agriculture (PISAgro) announced that its working group on rice had agreed to launch its first pilot project in the upcoming growing season. PISAgro is a partnership between Government of Indonesia and several Indonesian and multinational corporations. Bayer CropScience will supply hybrid rice seed and a crop protection package for farmers to the Indonesian company TPS Food. Both Bayer and TPS will support farmers through the growing and cultivation process to ensure quality and will provide training to farmers in good agricultural practices.²¹⁹³

On 29 May 2013, the World Bank released the Procurement Plan for Indonesia's SMARTD project.²¹⁹⁴ As of 31 May 2013, the World Bank has disbursed USD4.12 million in three installments in August 2012, March 2013, and May 2013.²¹⁹⁵ In the project's second Implementation Status & Results document released on 27 June 2013, the World Bank ranked both the project's progress towards achieving its Project Development Objective and its overall Implementation Progress as "moderately satisfactory."²¹⁹⁶ This assessment is a regression from the first Implementation Status & Results document, which found both categories of progress "satisfactory."2197

Thus, Indonesia was awarded a score of +1 for its efforts in development and capacity building in IAARD and for its multi-stakeholder initiative to increase rice crop productivity through the use of practices of sustainable agriculture.

Analyst: Erin Singer

²¹⁹² OECD Review of Agricultural Policies: Indonesia 2012, Organization for Economic Cooperation and Development (Paris) 19 October 2012. Date of Access: 4 January 2013.

http://www.keepeek.com/Digital-Asset-Management/oecd/agriculture-and-food/oecd-review-of-

agricultural-policies-indonesia-2012/policy-trends-and-evaluation_9789264179011-7-en. ²¹⁹³ News and Productivity Monthly Publication Issue 1, Partnership for Indonesia Sustainable Agriculture (Jakarta) November 2012. Date of Access: 5 January 2013.

http://pisagro.org/wp-content/uploads/2012/11/PISAGRO%20NOV12.pdf.

²¹⁹⁴ Indonesia - Sustainable Management of Agricultural Research and Technology Dissemination (SMARTD): Procurement Plan, World Bank (Washington) 29 May 2013. Date of Access: 29 June 2013. http://www-

wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/05/30/000333037 201305301041 29/Rendered/PDF/780830PROP0P110n0SMARTD0061020120NO.pdf.

²¹⁹⁵ Sustainable Management of Agricultural Research and Technology Dissemination (SMARTD): Financials, World Bank (Washington) 31 May 2013. Date of Access: 29 June 2013.

http://www.worldbank.org/projects/P117243/sustainable-management-agricultural-research-technologydissemination-smartd?lang=en.

²¹⁹⁶ Implementation Status & Results Sq. 02: Indonesia Sustainable Management of Agricultural Research and Technology Dissemination (SMARTD), World Bank (Washington) 27 June 2013. Date of Access: 29 June 2013. http://www-

wds.worldbank.org/external/default/WDSContentServer/WDSP/EAP/2013/06/27/090224b081cc332c/1 0/ Rendered/PDF/Indonesia000Su0Report000Sequence002.pdf.

²¹⁹⁷ Implementation Status & Results: Indonesia Sustainable Management of Agricultural Research and Technology Dissemination (SMARTD), World Bank (Washington) 24 November 2012. Date of Access: 5 January 2013. http://www-

wds.worldbank.org/external/default/WDSContentServer/WDSP/EAP/2012/11/24/090224b0817a0360/1 0/ Rendered/PDF/Indonesia000Su0Report000Sequence001.pdf.

Italy: 0

Italy has partially complied with its commitment on sustainable agriculture. Italy has expressed its understanding of the importance of practices sustainable water and soil use and stated its intent to develop and implement such practices. Italy has begun to develop appropriate legislation.

On 11 September 2012, Italy's Minister of Agriculture and Forestry Mario Catania attended the informal Council of Ministers for Agriculture and Fisheries of the European Union. Minister Catania stated that water and soil conservation are fundamental issues, and polices must be developed to address them.²¹⁹⁸ During his speech, the minister referenced the initiatives Italy is undertaking to address these issues domestically. He said changes to the climate in the Mediterranean have led to the need to use and store water more efficiently. As a result, Italy would be investing in new reservoirs, irrigation systems, and conservation programs while also trying to halt overbuilding on agricultural land.²¹⁹⁹

On 15 June 2013, Italy's new Minister of Agriculture, Food and Forestry Policies Nunzia De Girolamo announced that Italy's Council of Ministers had approved a bill that aims to conserve soil consumption and reuse edified soil.²²⁰⁰ The bill provides for the establishment of an interministerial Committee that would produce an annual report on national soil consumption that will then be presented by the Minister of Agriculture to the Italian Parliament, and set out soil reuse obligations for municipalities.²²⁰¹

Italy has taken steps to develop and implement practices of sustainable use of soils and water. Thus, for approving a bill that monitors soil consumption and sets out soil reuse obligations for Italy's municipalities, Italy is awarded a score of 0.

Analyst: Nikki Vukasovic

Japan: -1

Japan has not complied with its commitment on sustainable agriculture, failing to develop or implement well-known technologies, practices, or techniques such as soil fertility enhancement, minimum tillage, and agroforestry in order to improve the efficiency of water and soil use in a sustainable manner.

On December 2012, the Japan International Research Center for Agricultural Sciences (JIRCAS) — an incorporated Administrative Agency under the Japanese Ministry of Agriculture, Forestry and Fisheries — in conjunction with the Thai Department of Agriculture, hosted an international

http://www.politicheagricole.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/5406.

²¹⁹⁸ Consiglio Informale Ministri Agricoltura Ue, Catania: Questione Dell'acqua e Salvaguardia Dei Terreni Sono Temi Fondamentali, Servono Politiche Mirate, Ministry of Agricultural, Food, and Forestry Policies (Rome) 11 September 2012. Date of Access: 5 January 2013.

http://www.politicheagricole.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/5406.

²¹⁹⁹ Consiglio Informale Ministri Agricoltura Ue, Catania: Questione Dell'acqua e Salvaguardia Dei Terreni Sono Temi Fondamentali, Servono Politiche Mirate, Ministry of Agricultural, Food, and Forestry Policies (Rome) 11 September 2012. Date of Access: 5 January 2013.

²²⁰⁰ De Girolamo Comments the Soil Consumption Decree, Agricoltura Italiana Online (Rome) 17 June 2013. Date of Access: 25 June 2013.

http://www.aiol.it/en/contenuti/attualita/de-girolamo-comments-soil-consumption-decree.

²²⁰¹ De Girolamo Comments the Soil Consumption Decree, Agricoltura Italiana Online (Rome) 17 June 2013. Date of Access: 25 June 2013.

http://www.aiol.it/en/contenuti/attualita/de-girolamo-comments-soil-consumption-decree.

workshop on carbon sequestration in soils through farmland management.²²⁰² The workshop "promoted the information exchange among the researchers in this field and successfully provided the latest achievements in soil carbon sequestration studies and long term soil experiments."²²⁰³

Internationally, Japan has taken some steps to disseminate its agricultural practices to developing countries. On 28-29 November 2012, the JIRCAS, under the auspices of several Japanese government ministries including the Ministry of Agriculture, Forestry, and Fisheries, the Japan International Cooperation Agency, and the Japan Forum on International Agricultural Research for Sustainable Development, hosted a conference, titled "Resilient Food Production Systems: The Role of Agricultural Technology Development in Developing Regions."²²⁰⁴

Also, on 19 December 2012, Japanese Government donated 33 units of agricultural mechanization equipment worth USD5 million to Uganda in order to increase Uganda's capabilities to cope with natural disasters caused by climate change.²²⁰⁵

On 24 July 2013, Government of Japan has pledged PHP2.64 billion (approximately USD61 million) towards the "Mindanao Sustainable Agrarian and Agriculture Development" (MinSAAD) project in the Philippines.²²⁰⁶ The project is aimed to increase agricultural productivity for small-scale agricultural farmers. MinSAAD will help construct irrigation facilities, post-harvest facilities, and farm to market support. MinSAAD ensures sustainable agriculture developed in the Mindanao region of the Philippines.

However, Government of Japan has not yet passed any legislation or taken other actions to improve the sustainability of its domestic agriculture sector.

Thus, despite Japan's efforts to promote sustainable agriculture internationally, Japan has been an awarded a score of -1.

Analyst: Joyce Arabian Lead Analyst: Samantha Young

²²⁰² JIRCAS International Workshop: Carbon Sequestration in Soils Through Farm Land Management – The Latest World Researches and Relevancy in Southeast Asia, Japan International Research Center for Agricultural Sciences (Tokyo) 6 December 2012. Date of Access: 13 January 2013. http://www.jircas.affrc.go.jp/english/reports/s20121206e.html.

²²⁰³ JIRCAS International Workshop: Carbon Sequestration in Soils Through Farm Land Management – The Latest World Researches and Relevancy in Southeast Asia, Japan International Research Center for Agricultural Sciences (Tokyo) 6 December 2012. Date of Access: 13 January 2013. http://www.ijrcas.affrc.go.in/english/reports/s20121206e.html

http://www.jircas.affrc.go.jp/english/reports/s20121206e.html. ²²⁰⁴ JIRCAS International Symposium 2012 Resilient Food Production Systems, Japan International Research Center for Agricultural Sciences (Tokyo) 29 November 2012. Date of Access: 13 January 2013. http://www.jircas.affrc.go.jp/english/reports/s20121128e.html. ²²⁰⁵ Japan Dopates Agricultural Environment Parily Market (Weight 1997)

²²⁰³ Japan Donates Agricultural Equipment, Daily Monitor (Kampala) 19 December 2012. Date of Access:13 January 2013.

http://www.monitor.co.ug/News/National/Japan-donates-agricultural-equipment/-/688334/1647128/-/lawq7q/-/index.html. ²²⁰⁶ Farm project in Mindanao to get funds from Japan, Buissness Monitor (Philippines) 16 July 2013. Date

²²⁰⁶ Farm project in Mindanao to get funds from Japan, Buissness Monitor (Philippines) 16 July 2013. Date of Access: 24 July 2013.

http://businessmirror.com.ph/index.php/en/business/agri-commodities/16548-farm-project-in-mindanao-to-get-funds-from-japan.

Korea: -1

Korea has not complied with its commitment on sustainable agriculture. It has failed to foster and promote the use of sustainable agricultural technologies, especially in regard to minimizing water use and effective soil management.

Korea's current policy towards the country's agriculture sector is very broad, as the Ministry of Agriculture states that its intentions for the sector are to "reinforce the consumer orientated agricultural food policy and focus on competitiveness improvement focusing primarily on the agricultural management system and systematic promotion of agricultural policy."²²⁰⁷ With regards to the development of technologies within the agricultural sector, Government of Korea is focused on fostering research and development in biotechnology, as opposed to fostering research in sustainability.²²⁰⁸

On 28 November 2012, Al Jazeera released its coverage on Korea and its current development of vertical farms.²²⁰⁹ Korea has been developing new ways to make agriculture more sustainable and environmentally-friendly through focusing on making urban spaces more "green," to the point where skyscrapers could mimic natural conditions for farming.²

Government of Korea has also been sharing its agricultural techniques over the past few years through workshops with officials from around the world.²²¹¹ On 22 August 2012, Government of India's Ministry of Rural Development posted a bulletin for officials to take part in a sustainable agricultural development summit in Korea. The main objectives of the summit are: "to learn cultivation technology and management for environmentally agriculture" and to disseminate Korea's policies on sustainability.²²¹²

²²⁰⁷ Promotion of a Comprehensive Agriculture Industry and Community Plan, Ministry for Food Agriculture Forestry and Fisheries (Sejong) 2012. Date of Access: 26 December 2012. http://english.mifaff.go.kr/eng/list.jsp?group_id=1002&menu_id=1024&link_menu_id=1072&division=H

<u>&board_kind=&board_skin_id=&parent_code=1002&depth=1&tab_yn=Y</u>. ²²⁰⁸ Promotion of a Comprehensive Agriculture Industry and Community Plan, Ministry for Food

Agriculture Forestry and Fisheries (Sejong) 2012. Date of Access: 26 December 2012.

http://english.mifaff.go.kr/eng/list.jsp?group id=1000&menu id=1019&link menu id=&division=H&boar <u>d kind=&board_skin_id=&parent_code=1000&depth=1&tab_yn=N.</u>

Korea's Vertical Farms Envision a Greener Future, Korea Culture and Information Service (Seoul) 28 November 2012. Date of Access: 26 December 2012.

http://www.korea.net/NewsFocus/Sci-Tech/view?articleId=103942. ²²¹⁰ Korea's Vertical Farms Envision a Greener Future, Korea Culture and Information Service (Seoul) 28 November 2012. Date of Access: 26 December 2012.

http://www.korea.net/NewsFocus/Sci-Tech/view?articleId=103942

Korea's Agricultural Technology Goes Global, Korea Culture and Information Service (Seoul) 2 September 2011. Date of Access: 26 December 2012.

http://www.korea.net/NewsFocus/Policies/view?articleId=88567.

Training Programme on Sustainable Agriculture Development, Ministry of Rural Development (New Delhi) 22 August 2012. Date of Access: 26 December 2012.

http://rural.nic.in/sites/downloads/latest/Training Sustainable Agriculture Development Korea11 31Oct1 2.pdf

On 19 March 2013, Government of Korea released a report stating that it would promote "fieldbased technological innovation" through the commercialization of agrifood technology.²²¹³ The Korea government will give loans to agrifood businesses which have patents on technology but are lacking the means to produce them.²²¹⁴ However, the report did not explicitly speak of prioritizing sustainable agriculture techniques.

On 24 June 2013, Government of Korea announced that it would be partnering with developing countries in Asia and Africa to provide training on Korea's sustainable agricultural methods to about 20 agricultural officials.²²¹⁵ Similarly, on 24 June 2013, Government of Korea's Ministry of Agriculture announced that it would be partnering with the Netherlands on agricultural development, sharing practices and methods.²²¹⁶

Presently, Korea lacks a national program on development and implementation of sustainable agricultural and water use practices. Thus, Korea receives a score of -1.

Analyst: Vipasha Shaikh

Mexico: 0

Mexico has partially complied with the commitment on sustainable agriculture. Mexico has taken steps to improve the efficiency of water and soil use in a sustainable manner by enlarging the budget of a program directed at water and soil conservation.

On 24 September 2012, during a G20 Meeting of Agriculture Chief Scientists, Mexico's Secretary of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA), Mayorga Castañeda, stated that as current chair of the G20 he proposed that the primary focus of

 ²²¹³ Promoting Field Based Technological Innovation & the Creative Economy Through Agrifood
Technology Commercialization, Ministry of Agriculture, Food and Rural Affairs (Seoul) 19 March 2013.
Date of Access: 1 June 2013.

http://english.mafra.go.kr/eng/list.jsp?id=27963&pageNo=1&NOW_YEAR=2013&group_id=1001&menu_id=1020&link_menu_id=1020&division=B&board_kind=G&board_skin_id=G1&parent_code=1001&link_url=&depth=1&code=&link_target_yn=&menu_introduction=&menu_name=&popup_yn=&reference=&tab_yn=N.

<u>&tab_yn=N</u>. ²²¹⁴ Promoting Field Based Technological Innovation & the Creative Economy Through Agrifood Technology Commercialization, Ministry of Agriculture, Food and Rural Affairs (Seoul) 19 March 2013. Date of Access: 1 June 2013.

http://english.mafra.go.kr/eng/list.jsp?id=27963&pageNo=1&NOW_YEAR=2013&group_id=1001&menu_id=1020&link_menu_id=1020&division=B&board_kind=G&board_skin_id=G1&parent_code=1001&link_url=&depth=1&code=&link_target_yn=&menu_introduction=&menu_name=&popup_yn=&reference= &tab_yn=N.

²²¹⁵ Exporting Korean Agricultural Policies to Developing Nations in Africa and Asia, Ministry of Agriculture, Food and Rural Affairs (Seoul) 24 June 2013. Date of Access: 25 June 2013.

http://english.mafra.go.kr/eng/list.jsp?id=28056&pageNo=1&NOW_YEAR=2013&group_id=1001&menu_id=1020&link_menu_id=&division=B&board_kind=G&board_skin_id=G1&parent_code=1001&link_url =&depth=1&code=&link_target_yn=&menu_introduction=&menu_name=&popup_yn=&reference=&tab_yn=N.

<u>yn=N.</u> ²²¹⁶ The Park Geun-hye Administration joins the Netherlands for Agricultural Development, Ministry of Agriculture, Food and Rural Affairs (Seoul) 24 June 2013. Date of Access: 25 June 2013.

http://english.mafra.go.kr/eng/list.jsp?id=28055&pageNo=1&NOW_YEAR=2013&group_id=1001&menu_id=1020&link_menu_id=&division=B&board_kind=G&board_skin_id=G1&parent_code=1001&link_url =&depth=1&code=&link_target_yn=&menu_introduction=&menu_name=&popup_yn=&reference=&tab_yn=N.

work on food security this year should be to develop tools to increase agricultural production and productivity in a sustainable manner, creating economic opportunities for small production units.²²¹⁷

On 22 January 2013, Mexico's President Enrique Peña Nieto announced that National Commission for Arid Zones program's (CONAZA) — which seeks to increase economic activity in Mexico's rural areas by funding water and soil conservation projects — budget for 2013 would be MXN720 million, which constitutes an increase of over MXN300 million budgeted in 2012.²²¹⁸ The funds will be applied to programs that benefit the conservation and sustainable use of soil and water and ensure that Mexico's food production could withstand future droughts.²²¹⁹ CONAZA has several components including Conservation and Sustainable Use of Soil and Water (COUSSA). This component "aims to contribute to the conservation, sustainable use and management of land resources, water and vegetation used in primary production" by enabling rural producers to undertake conservation-orientated projects.²²²⁰

On 23 June 2013, the head of SAGARPA Enrique Martinez announced that Mexico was investing MXN780 million to develop arid zones in Mexico.²²²¹ MXN600 million have been allocated to the Small Waterworks Construction (POH) program that will fund 234 projects in order to increase water efficiency and sustainability in Mexico's arid zones.²²²²

Thus, for its increased funding of CONAZA and investment in projects intended to develop infrastructure that will improve water efficiency and sustainability in its arid regions, Mexico was awarded a score of 0.

Analyst: Nikki Vukasovic

Russia: +1

Russia has fully complied with the three components of the commitment on food and agriculture.

On 14 July 2012, the Russian Government approved the State Program of Agricultural Development and Agricultural Products, Raw Materials and Food Markets Regulation in 2013-2020. One of the stated goals of the program is to "improve the efficiency of land and other

(México City) 10 July 2012. Date of Access: 9 February 2013.

²²¹⁷ Inicia Reunión de Científicos Agrícolas del G20, Ganadería, Desarrollo Rural, Pesca y Alimentación (México City) 24 September 2012. Date of Access: 6 January 2013.

http://www.sagarpa.gob.mx/saladeprensa/discursos2/Paginas/2012D017.aspx.

²²¹⁸ Impulsará SAGARPA capacidades productivas de habitantes en las zonas áridas de México erradicando asistencialismos, Secretaria De Agricultura Ganadería, Desarrollo Rural, Pesca y Alimentación (México City) 4 February 2012. Date of Access: January 2013.

http://www.sagarpa.gob.mx/saladeprensa/2012/Paginas/2013B058.aspx.

²²¹⁹ Designan a nuevo director general de la CONAZA, Secretaria De Agricultura Ganadería, Desarrollo Rural, Pesca y Alimentación (México City) 22 January 2013. Date of Access: 6 January 2013. http://www.sagarpa.gob.mx/saladeprensa/2012/Paginas/2013B031.aspx.

²²²⁰ ¿Qué hace la CONAZA?, Secretaria De Agricultura Ganadería, Desarrollo Rural, Pesca y Alimentación

http://www.conaza.gob.mx/index.php/consulta-y-servicios/costos-por-reproducción-de-información. ²²²¹ Invertirá Sagarpa mil 780 mdp en zonas áridas, Grupo Fórmula (México City) 23 June 2013. Date of Access: 25 June 2013.

http://www.radioformula.com.mx/notas.asp?Idn=334128.

²²²² Invertirá Sagarpa mil 780 mdp en zonas áridas, Grupo Fórmula (México City) 23 June 2013. Date of Access: 25 June 2013.

http://www.radioformula.com.mx/notas.asp?Idn=334128.

resources and ecologization of production process." The program provides for the measures to conduct amelioration and improve the use of arable land through enhancing of the amelioration systems, funding of research and development activities, and training in this sphere.²²²³

In 2013, construction and modernization of 73 amelioration objects is to be conducted in the framework of implementation of the "Preservation and restoration of soil fertility of agricultural land as a national heritage of Russia for the period of 2006-2010 and up to 2013" federal program. The federal budget spending is planned to amount to approximately USD179 million.

The works on 54 objects are to be completed in 2013.²²²⁴

On 22 January 2013, the Russian Government initiated the development of the federal targeted program "Development of agricultural land amelioration in Russia in 2014 — 2020"²²²⁵ which stipulates measures to improve water resources use in agriculture. Among these measures are: reconstruction and modernization of existing amelioration systems through introduction of new technologies and equipment, agroforestal, phytomeliorative, land clearance activities, research and development exercise.²²²⁶ According to the Deputy Minister of Agriculture Pavel Semenov by 2020 the project's implementation will allow to bring 841 hectares into agricultural production and to create 92.9 thousand employment opportunities.²²²⁷

In pursuance of the Government decree the Department of Amelioration of the Russian Ministry of Agriculture conducts a number of economically viable regional agricultural development programs, which provide for compensation of the costs of construction and modernization of amelioration systems to the farmers' enterprises. In 2013 the compensation is planned to amount to approximately USD87.5 million.²²²⁸

Russia has taken actions to improve the efficiency of water and soil use in agriculture through development and implementation of available technologies, soil fertility enhancement and agroforestry. Thus, it gets a score of +1.

Analyst: Andrei Sakharov

²²²³ State Program of Agricultural Development and agricultural products, raw materials and food markets regulation in 2013-2020, Russian Ministry of Agriculture. Date of Access: 26 March 2013. http://www.mcx.ru/navigation/docfeeder/show/342.htm.

²²²⁴ The construction and reconstruction of the amelioration complex objects is under way, Russian Ministry of Agriculture 14 February 2013. Date of Access: 26 March 2013.

http://www.mcx.ru/news/news/show/9470.355.htm.

 ²²²⁵ Draft federal target program "Development of agricultural land amelioration in Russia in 2014 – 2020",
Russian Ministry of Agriculture 25 March 2013. Date of Access: 27 March 2013.

http://www.mcx.ru/documents/document/v7_show/23299.299.htm.

²²²⁶ On approval of the concept of the federal target program "Development of agricultural land amelioration Russia in 2014 - 2020 years", Government of Russia 22 January 2013. Date of Access: 27 March 2013.

http://xn--80aealotwbjpid2k.xn--p1ai/gov/results/22537/.

²²²⁷ The Future of Amelioration, Russian Ministry of Agriculture 27 March 2013. Date of Access: 27 March 2013. <u>http://www.mcx.ru/news/news/v7_show/10612.285.htm</u>.

²²²⁸ The ameliorated lands are to be put into operation with state support, Russian Ministry of Agriculture 25 March 2013. Date of Access: 27 March 2013.

http://www.mcx.ru/news/news/show/10536.355.htm.

Saudi Arabia: 0

Saudi Arabia has partially complied with its commitment on sustainable agriculture, taking steps to promote sustainable agricultural practices internationally.

On 19 January 2013, Saudi Arabia participated in the 5th Berlin Agriculture Minister's Summit.²²²⁹ The delegation of Saudi Arabia joined the Summit's participants in a call to increase capital investments to develop a sustainable agri-food industry, especially in developing countries.²²³⁰

On 9 October 2012, the new Organic Agricultural Policy for Saudi Arabia was presented in Riyadh.²²³¹ The policy encompasses plans for higher agricultural production in addition to certain resource conservation objectives in the organic sector.²²³² The implementation of this policy is forthcoming, and is expected to be adopted in 2013.²²³³

However, the emphasis of Saudi Arabian agricultural policy is, at present, more focused on investment in foreign projects, rather than domestic sustainability. For instance, on 18 September 2012, Saudi Arabian Minister of Agriculture Fahd Balghunaimthe signed an agreement to increase agricultural investment in the Sudan.²²³⁴ Similarly, Eid al-Ma'arik, chairman of the Agricultural Investment Committee at the Saudi Council of Chambers, formally announced the government's decision to invest USD11 billion in foreign agricultural projects, most notably in the Ukraine, Brazil, and Canada.²²³⁵

²²²⁹ Participating countries of the Berlin Agriculture Ministers' Summit 2013, Federal Ministry of Food, Agriculture and Consumer Protection (Bonn) 19 January 2013. Date of Access: 8 February 2013. http://www.bmelv.de/SharedDocs/Downloads/Ministerium/Veranstaltungen/GFFA2013/participating_coun tries_Agrarministergipfel2013_EN.pdf?__blob=publicationFile.

²³⁰ Press release no. 22 from 19.01.13: Berlin Agriculture Ministers' Summit 80 countries commit themselves to a resolute fight against hunger, Federal Ministry of Food, Agriculture and Consumer Protection (Bonn) 19 January 2013. Date of Access: 8 February 2013.

http://www.bmelv.de/SharedDocs/Pressemitteilungen/EN/2013/0022-Internationaler-

Agrarministergipfel.html. 2231 Organic Agricultural Policy for Saudi Arabia, Research Institute of Organic Agriculture (Frick) 24 October 2012. Date of Access: 8 January 2013.

http://www.fibl.org/en/service-en/news-archive/news/article/organic-agricultural-policy-for-saudiarabia.html.

²²³² Organic Agricultural Policy for Saudi Arabia, Research Institute of Organic Agriculture (Frick) 24 October 2012. Date of Access: 8 January 2013.

http://www.fibl.org/en/service-en/news-archive/news/article/organic-agricultural-policy-for-saudiarabia.html. 2233 Organic Agricultural Policy for Saudi Arabia, Research Institute of Organic Agriculture (Frick) 24

October 2012. Date of Access: 8 January 2013.

http://www.fibl.org/en/service-en/news-archive/news/article/organic-agricultural-policy-for-saudi-

arabia.html. 2234 Saudi Arabia, Sudan Sign Farm-Investment Accord, Al-Awsat Says, Bloomberg (New York City) 19 September 2012. Date of Access: 8 January 2013.

http://www.bloomberg.com/news/2012-09-19/saudi-arabia-sudan-sign-farm-investment-accord-al-awsat-

<u>says.html.</u> ²²³⁵ Saudi to Invest Over US\$11bn in Farmland Projects, Arabian Business (Dubai) 20 September 2012. Date of Access: 8 January 2013.

http://www.arabianbusiness.com/saudi-invest-over-us-11bn-in-farmland-projects-473653.html.

This trend in Saudi Arabia's policy encourages domestic companies to invest in farms in Africa, with the intention of replacing local production with a stable imported food supply.²²³⁶

Following this initiative, on 14 April 2013, Waleed El-Khereiji, head of the Grains Silos and Flour Mills Organization (GSFMO) announced that Saudi Arabia will cease all domestic production of wheat by 2016.²²³⁷

On 11-12 March 2013, Saudi Arabia hosted the Saudi International Agriculture Technologies Conference 2013, to discuss "water rationing techniques for agriculture, greening techniques using desert plants, and salt tolerant plants," in addition to promoting "clean and organic agriculture techniques."²²³⁸

Saudi Agriculture Minister Dr. Balghunaim affirmed that "the priority of the Ministry of Agriculture is to achieve sustainable agricultural development while conserving our natural resources, particularly water."²²³⁹ However, Saudi Arabia is interested in diverting most of its fresh water for drinking purposes instead of irrigation-intensive crops.²²⁴⁰

Saudi Arabia has engaged in a discussion and formulation of agricultural practices deemed appropriate for the country. Although still lacking domestically-oriented national policies for sustainable agriculture and efficient water use, Saudi Arabia has taken steps to promote sustainable agriculture internationally. For this, Saudi Arabia received a score 0.

Analyst: Mary Davidson

South Africa: +1

South Africa has complied with its commitment on sustainable agriculture, taking steps to improve water use efficiency within the country.

Government of South Africa has engaged in several measures to improve country efficiency in the country's use of water. On 30 August 2012, the South African Department of Water Affairs and Forestry announced that it is set to host a Water Conservation Conference, "calling on municipalities and all water users to reflect on how they can contribute to curbing water losses and curtailing wasteful uses of water."²²⁴¹ Moreover, on 27 August 2012, the Department published the second edition of the South African National Water Resource Strategy.²²⁴²

²²³⁶ Saudi to Invest Over US\$11bn in Farmland Projects, Arabian Business (Dubai) 20 September 2012. Date of Access: 8 January 2013.

http://www.arabianbusiness.com/saudi-invest-over-us-11bn-in-farmland-projects-473653.html.

²²³⁷ Kingdom to Halt Wheat Production by 2016, Arab News (Jeddah) 14 April 2013. Date of Access: 29 June 2013. <u>http://www.arabnews.com/node/448070</u>.

²²³⁸ Introductory Brochure, Saudi International Agriculture Technologies Conference 2013 (Riyadh) 11 March 2013. Date of Access: 29 June 2013.

http://www.kacstagri.org/2013/ar/images/Brochure/AR-Brochure.pdf.

²²³⁹ Introductory Brochure, Saudi International Agriculture Technologies Conference 2013 (Riyadh) 11 March 2013. Date of Access: 29 June 2013.

http://www.kacstagri.org/2013/ar/images/Brochure/AR-Brochure.pdf.

²²⁴⁰ Agri-Food Policy in the Kingdom of Saudi Arabia, Farrelly and Mitchell (Riyadh) 15 February 2013. Date of Access 29 June 2013.

http://www.farrellymitchell.ie/wp-content/uploads/2013/02/AgriculturePolicyintheKSA.pdf

²²⁴¹ Water Saving in an Ongoing Responsibility, Department of Water Affairs and Forestry (Pretoria) 20 August 2012. Date of Access: 13 January 2013.

On 11 October 2012, South African Minister of Water and Environmental Affairs Edna Molewa presided over the opening of the Rand Water Academy in Zuikerbosch. Minister Molewa "acknowledged that the shortage of appropriate skills and capability in the right places was a critical challenge in the water sector."²²⁴³ This includes a lack of trained engineers, scientists, and artisans, as well as adequate leadership, governance, and oversight.²²⁴⁴

On 5 November 2012, the Department of Water Affairs and Forestry announced that it would spend a further ZAR258 million "on clean-up, re-habilitation and maintenance of the Hartebeespoort Dam in the North West Province."²²⁴⁵ Likewise, on 21 November 2012, the Deputy Minister of Water and Environmental Affairs, Ms. Rejoice Mabudafhasi, instituted the "Sandspruit River Clean Up." The initiative is an effort to "deepen the Department of Water Affairs' call to communities for active participation in water resource management for sustainability."2246

Moreover, on 10 December 2012, the South African Department of Water Affairs confirmed that it is taking "measures to ensure sustainable water supply in the short and long term for the Nelson Mandela Bay Municipality and surrounding areas."²²⁴⁷ The Department established that "the most important measures to ensure water security for this important area are to intensify the implementation of further water conservation and water demand management (WC/WDM) initiatives to ensure efficient use of water."2248

http://www.dwaf.gov.za/Communications/PressReleases/2012/Rand%20Water%20Academy.pdf. More Investment for Hartebeespoort Dam, Department of Water Affairs and Forestry (Pretoria) 5 November 2012. Date of Access: 13 January 2013.

http://www.dwaf.gov.za/Communications/PressReleases/2012/More%20investment%20for%20Hartebeesp

²²⁴⁸ Sustainable Water Supply for Nelson Mandela Bay Municipality and Surrounding Areas, Department of Water Affairs and Forestry (Pretoria) 10 December 2012. Date of Access: 13 January 2013. http://www.dwaf.gov.za/Communications/PressReleases/2012/Algoa%20SSC.pdf.

http://www.dwaf.gov.za/Communications/PressReleases/2012/Water%20Saving%20is%20an%20Ongoing %20Responsibility.pdf. 2242 2nd National Water Resource Strategy, Department of Water Affairs and Forestry (Pretoria) 27 August

^{2012.} Date of Access: 13 January 2013.

http://www.dwaf.gov.za/Communications/PressReleases/2012/Media%20Briefing%202nd%20National%2 0Water%20Resource%20Strategy.pdf.

²²⁴³ Minister of Water and Environmental Affairs to Launch the Rand Water Academy, Department of Water Affairs and Forestry (Pretoria) 11 October 2012. Date of Access: 13 January 2013.

http://www.dwaf.gov.za/Communications/PressReleases/2012/Rand%20Water%20Academy.pdf.²²⁴⁴ Minister of Water and Environmental Affairs to Launch the Rand Water Academy, Department of Water Affairs and Forestry (Pretoria) 11 October 2012. Date of Access: 13 January 2013.

oort%20Dam.pdf.²²⁴⁶ Deputy Minister Mabudafhasi to Embark on Sandspruit River Clean Up In Senekal, Free State, Department of Water Affairs and Forestry (Pretoria) 21 November 2012. Date of Access: 13 January 2013. http://www.dwaf.gov.za/Communications/PressReleases/2012/Sandspruit%20river%20clean%20up%20in %20Senekal.pdf.

²²²⁷ Sustainable Water Supply for Nelson Mandela Bay Municipality and Surrounding Areas, Department of Water Affairs and Forestry (Pretoria) 10 December 2012. Date of Access: 13 January 2013. http://www.dwaf.gov.za/Communications/PressReleases/2012/Algoa%20SSC.pdf.

On 6 May 2013, Minister of Agriculture, Forestry, and Fisheries Tina Joemat-Pettersson met with Germany's Minister of Food, Agriculture, and Consumer Protection Ile Aigner. Discussions included agriculture, trade, and world food security.²²⁴⁹

For its investments in the development of efficient water use practices and efforts to bring municipalities to apply water conservation practices, South Africa is awarded a score of +1.

Analyst: Joyce Arabian Lead Analyst: Samantha Young

Turkey: 0

Turkey has partially complied with its commitment to develop and implement sustainable agricultural practices.

The Turkish government has instituted a number of incentives in order to promote sustainable agriculture. For example, on 6 December 2012, the Turkish Ministry of Food, Agriculture, and Livestock published a communiqué stating that, "farmers engaged in Good Agricultural Practices [are to be] provided with a support payment of TRY20 per decare for fruits and vegetables, and TRY80 per decare for protected farming."²²⁵⁰

In September 2012, Turkey's Agricultural Minister Mehmet Mehdi Eker reported an increase in funding for research and development projects from TRY11 million to TRY126 million in a speech at the opening of the GAP International Agricultural Research and Training Center in Diyarbakir.²²⁵¹

However, most Turkish agricultural research and spending has been focused on increasing production than enhancing sustainability, as demonstrated by the allocation of TRY63 million to help farmers buy modern agricultural machinery and equipment.²²⁵²

Although existing government initiatives, including the National Climate Change Plan (2011-2013)²²⁵³ and the Strategic Plan (2012-2016),²²⁵⁴ seek to address agricultural sustainability and

- ²²⁵⁰ Support Payments for Good Agricultural Practices, Republic of Turkey Ministry of Food, Agriculture and Livestock (Ankara) 2012. Date of Access: 9 January 2013.
- http://www.tarim.gov.tr/en/agricultural-support/item/537-t%C3%BCrkiye-iyi-tar%C4%B1m-

uygulamalar%C4%B1-alan-bazl%C4%B1-destekleme-%C3%B6demeleri.html.

²²⁴⁹ Minister of Agriculture, Forestry and Fisheries meets her German counterpart, Department of Agriculture, Forestry, & Fisheries (Pretoria) 6 May 2013. . Date of Access: 24 July 2013. http://www.nda.agric.za/docs/media/Germany%20SA%20Statement.pdf

²²⁵¹ Minister Eker opens the GAP International Agricultural Research and Training Center, Ministry of Food, Agriculture and Livestock (Ankara) 9 January 2013. Date of Access: 9 January 2013. http://www.tarim.gov.tr/en/cuncel.haberler/item/939.gan.divarbakir.ac%C4%B19%C4%B1s.html

http://www.tarim.gov.tr/en/guncel-haberler/item/939-gap-diyarbakir-ac%C4%B11%C4%B1s.html. ²²⁵² Undersecretary Mirmahmutogullari opens the Agricultural Exhibition in Ankara, Ministry of Food, Agriculture and Livestock (Ankara) 2012. Date of Access: 9 January 2013.

http://www.tarim.gov.tr/en/guncel-haberler/item/927-argotec-mustesar-fuar.html

²²⁵³ Republic of Turkey National Climate Change Plan, Ministry of Environment and Urbanization (Ankara) July 2011. Date of Access: 9 January 2013.

http://www.cem.gov.tr/erozyon/Files/faaliyetler/dis_iliskiler/iklim_degisikligi_cerceve_sozlesmesi/Cevre_ Bak Ulusal Eylem Plani ing 2011 2023 2 .pdf.

²²⁵⁴ Strategic Plan, Republic of Turkey Ministry of Food, Agriculture and Livestock (Ankara) 2012. Date of Access: 9 January 2013.

http://www.tarim.gov.tr/en/ministry/strategic-plan.html.

environmental protection, there is very little evidence of these policies being implemented since the Los Cabos Summit.

On 20 June 2013, Turkish Minister of Food, Agriculture and Livestock Mehdi Eker made a speech at the 38th General Session of the Food and Agriculture Organization of the United Nations (FAO) Conference, affirming the importance of preserving natural ecological systems.²²⁵⁵ Minister Eker noted the expected increase in the world's population, which will result in "the requirement for more sustainable use of resources."²²⁵⁶

Thus, Turkey receives a score of 0 for its ongoing financial support of research and development of sustainable agricultural practices.

Analyst: Mary Davidson

United Kingdom: +1

The United Kingdom has fully complied with the commitment to develop and implement sustainable agricultural technologies and practices for efficient water and soil use.

On 31 January 2013, the United Kingdom's Environment Secretary Owen Paterson announced the creation of a new, independent public body to own, maintain, and protect publicly-owned forests.²²⁵⁷ The action is a response to the Independent Panel on Forestry's series of recommendations from the Final Report²²⁵⁸ on forests conservation.²²⁵⁹ The government has expressed its support for many of the recommendations and agreed to pursue appropriate policies, including expanding wooded areas.

On 3 June 2013, Defra launched a EUR1.6 million project on improving river health within the United Kingdom.²²⁶⁰ The initiative empowers local communities to help preserve river water quality within their regions. The United Kingdom seeks to ensure it has enough clean river water for the future through sustainable, eco-friendly measures.²²⁶¹

²²⁵⁷ New public body will protect forests for future generations, Department for Environment, Food, and Rural Affairs (London) 31 January 2013. Date of Access: 14 February 2013.

 ²²⁵⁵ "I Look Forward to Your Support for Turkey's FAO Council Membership," Republic of Turkey Ministry of Food, Agriculture and Livestock (Ankara), 20 June 2013. Date of Access: 29 June 2013.
<u>http://www.tarim.gov.tr/Sayfalar/Eng-1033/HaberDetay.aspx?ListName=Haberler&rid=176&refId=173</u>.
²²⁵⁶ "I Look Forward to Your Support for Turkey's FAO Council Membership," Republic of Turkey

Ministry of Food, Agriculture and Livestock (Ankara), 20 June 2013. Date of Access: 29 June 2013. http://www.tarim.gov.tr/Sayfalar/Eng-1033/HaberDetay.aspx?ListName=Haberler&rid=176&refId=173.

http://www.defra.gov.uk/news/2013/01/31/protect-forests/.

 ²²⁵⁸ Independent Panel on Forestry – Final Report, Department for Environment, Food, and Rural Affairs (London) 4 July 2012. Date of Access: 14 February 2013.

http://www.defra.gov.uk/forestrypanel/reports/.

²²⁵⁹ Government Forestry and Woodlands Policy Statement Incorporating the Government's Response to the Independent Panel on Forestry's Final Report, Department for Environment, Food, and Rural Affairs (London) 31 January 2013. Date of Access: 14 February 2013.

http://www.defra.gov.uk/publications/files/pb13871-forestry-policy-statement.pdf.

²²⁶⁰ River Health Gets EUR1.6 Million Boost, Department for Environment, Food and Rural Affairs (London) 3 June 2013. Date of Access: 4 June 2013.

https://www.gov.uk/government/news/river-health-gets-16-million-boost

²²⁶¹ River Health Gets EUR1.6 Million Boost, Department for Environment, Food and Rural Affairs (London) 3 June 2013. Date of Access: 4 June 2013.

https://www.gov.uk/government/news/river-health-gets-16-million-boost

In January 2013, the United Kingdom participated in the 5th Berlin Agriculture Minister's Summit.²²⁶² The British delegation joined the Summit's participants in a call to increase capital investments to develop a sustainable agri-food industry, especially in developing countries.²²⁶³

On 28 December 2012, the Department for Environment, Food and Rural Affairs (Defra) concluded a competition amongst entrepreneurs which sought to find sustainable technologies that could protect homes from flooding and conserve water especially in rural communities.²²⁶⁴

On 17 December 2012, Government of Britain announced that it was on track to planting one million new trees on British soil. The Big Tree Plant is a project that seeks to make urban places healthier. One in ten new trees is also being planted to create new orchards for communities to grow their own food.²²⁶⁵

On 10 July 2012, at a meeting of the Green Food Project Steering Group launched its initial report on the Green Food Project — a government-sponsored study on how Britain's food system must change to meet growing consumption and environmental demands. The report noted that the first steps to reforming Britain's food system include "introducing more innovative technology" and "improving conservation management."²²⁶⁶

Furthermore, on 10 July 2012, the British Parliament announced its intention to reform the country's water industry. The government seeks to open up the national water market in order to "drive innovation and open the market to new companies."²²⁶⁷ It is hoped that "increased competition in the wholesale market will give water companies an incentive to come up with cheaper, more sustainable solutions to sourcing water."²²⁶⁸

²²⁶² Participating countries of the Berlin Agriculture Ministers' Summit 2013, Federal Ministry of Food, Agriculture and Consumer Protection (Bonn) 19 January 2013. Date of Access: 8 February 2013. http://www.bmelv.de/SharedDocs/Downloads/Ministerium/Veranstaltungen/GFFA2013/participating_coun

tries_Agrarministergipfel2013_EN.pdf?__blob=publicationFile. ²²⁶³ Press release no. 22 from 19.01.13: Berlin Agriculture Ministers' Summit 80 countries commit themselves to a resolute fight against hunger, Federal Ministry of Food, Agriculture and Consumer Protection (Bonn) 19 January 2013. Date of Access: 8 February 2013.

http://www.bmelv.de/SharedDocs/Pressemitteilungen/EN/2013/0022-Internationaler-Agrarministergipfel.html.

²²⁶⁴ New Technology to Protect Homes From Flooding, Department for Environment Food and Rural Affairs (London) 28 December 2012. Date of Access: 29 December 2012.

http://www.defra.gov.uk/news/2012/12/28/new-technology-to-protect-homes-from-flooding/.

²²⁶⁵ On Track to Plant One Million New Neighbourhood Trees in England, Department for Environment Food and Rural Affairs (London) 17 December 2012. Date of Access: 23 December 2012. http://www.defra.gov.uk/news/2012/12/17/big-tree-plant/.

²²⁶⁶ Feeding the Nation and Enriching the Environment, Department for Environment Food and Rural Affairs (London) 10 July 2012. Date of Access: 23 December 2012. http://www.defra.gov.uk/news/2012/07/10/green-food-project/.

²²⁶⁷Government Sets out Ambitious Reform of the Water Industry, Department for Environment Food and Rural Affairs (London) 10 July 2012. Date of Access: 23 December 2012. http://www.defra.gov.uk/news/2012/07/10/water-industry-refor/.

²²⁶⁸ Government Sets out Ambitious Reform of the Water Industry, Department for Environment Food and Rural Affairs (London) 10 July 2012. Date of Access: 23 December 2012. http://www.defra.gov.uk/news/2012/07/10/water-industry-refor/.

Just prior to the Los Cabos Summit, in May 2012, Secretary of State for the Environment Carol Spelman made a statement that the Rio+20 Summit should prioritize sustainable agriculture.²²⁶⁹

The United Kingdom has taken action to promote the development and implementation of sustainable practices in forestry and water use. Thus, the United Kingdom received a score of +1.

Analyst: Vipasha Shaikh

United States: +1

The United States has fully complied with its commitment to support the development and use of sustainable agriculture methods in the face of a changing change.

On 24 August 2012, the United States' Secretary of Agriculture Tom Vilsack announced that the United States Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) would award USD26 million in Conservation Innovation Grants. These grants will be allocated to projects that develop and demonstrate innovative approaches for land conservation, including the areas of soil health improvement and water quality protection.²²⁷⁰

On 20 September 2012, the USDA partnered with the state of Colorado to launch the Rio Grande Basin Water Conservation Project to help conserve irrigation water and reduce groundwater withdrawal in the Rio Grande Basin. The program will be voluntary for agricultural producers in the area.²²⁷¹

Furthermore, on 10 September 2012, the USDA's Agricultural Research Service (ARS) announced the creation of a Long Term Agro-Ecosystem Research network to support the ARS' established long-term research in agricultural sustainability.²²⁷²

On 25 April 2013, the NRCS announced an additional USD35 million in financial assistance to farmers and ranchers in priority watershed areas to implement conservation practices intended to improve water quality.²²⁷³

Thus, for its investments in the development of water and soil conservation practices and the involvement with the implementation of the Rio Grande Basin Water Conservation Project, the United States is awarded a score of +1.

²²⁶⁹ Rio+20 Should Prioritise Sustainable Agriculture Says Caroline Spelman, The Guardian News UK (London) 24 May 2012. Date of Access: 28 December 2012.

http://www.guardian.co.uk/global-development/2012/may/24/rio-20-sustainable-agriculture-carolinespelman.

²²⁷⁰ USDA Awards \$26 Million in Conservation Innovation Grants, United States Department of Agriculture (Washington) 24 August 2012. Date of Access: 6 January 2013.

http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/newsroom/releases/?cid=STELPRDB1048728.

 ²²⁷¹ USDA and Colorado Announce Rio Grande Basin Water Conservation Project Agreement, United States Department of Agriculture (Washington) 20 September 2012. Date of Access: 6 January 2013.
<u>http://www.usda.gov/wps/portal/usda/usdahome?contentid=2012/09/0304.xml&navid=NEWS_RELEASE</u>
<u>&navtype=RT&parentnav=LATEST_RELEASES&edeployment_action=retrievecontent</u>.
²²⁷² USDA Establishes National Watershed Research Network, United States Department of Agriculture

²²⁷² USDA Establishes National Watershed Research Network, United States Department of Agriculture (Washington) 10 September 2012. Date of Access: 6 January 2013.

http://www.usda.gov/wps/portal/usda/usdahome?contentid=2012/09/0304.xml&navid=NEWS_RELEASE & avype=RT&parentnav=LATEST_RELEASES&edeployment_action=retrievecontent.

²²⁷³ NRCS helps improve water quality in watersheds across the country, United States Department of Agriculture (Washington) 25 April 2013. Date of Access: 4 July 2013.

http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/newsroom/releases/?cid=STELPRDB1097813.

European Union: 0

The European Union has partially complied with its commitment to support the development of and greater use of water and soil conservation practices. The European Union has spoken supportively on the matter and recently passed a sustainability-focused reform of its agricultural policy.

In January 2013, the European Union's several member states as well as the European Commission participated in the 5th Berlin Agriculture Minister's Summit.²²⁷⁴ The delegations of the European Union member states and the European Commission joined the Summit's participants in a call to increase capital investments to develop a sustainable agri-food industry, especially in developing countries.²²⁷⁵

The primary initiative of the European Union in relation to sustainable agriculture is the ongoing preparation of the Common Agricultural Policy (CAP) reform.²²⁷⁶ In October 2012, the European Commission presented a series of legal proposals designed to transform the existing CAP into a more effective policy for a more economically vibrant and sustainable agriculture.²²⁷⁷ The debate with concerned institutions and stakeholders is ongoing and expected to culminate in the approval and enactment of the CAP reform by 1 January 2014.²²⁷⁸ On 23 January 2013, the members of the European Parliament voted on the two provisions of the CAP reform, direct payments and rural development, thus adhering to the established timeline.²²⁷⁹

On 26 June 2013, the European Commission, the European Parliament, and the European Council reached a political agreement on CAP Reform.²²⁸⁰ The European Commission noted: "All Member States, all rural areas and all farmers will take simple, proven measures to promote

http://www.bmelv.de/SharedDocs/Pressemitteilungen/EN/2013/0022-Internationaler-Agrarministergipfel.html.

²²⁷⁴ Participating countries of the Berlin Agriculture Ministers' Summit 2013, Federal Ministry of Food, Agriculture and Consumer Protection (Bonn) 19 January 2013. Date of Access: 8 February 2013. http://www.bmelv.de/SharedDocs/Downloads/Ministerium/Veranstaltungen/GFFA2013/participating_coun tries Agrarministergipfel2013 EN.pdf? blob=publicationFile.

²²⁷⁵ Press release no. 22 from 19.01.13: Berlin Agriculture Ministers' Summit 80 countries commit themselves to a resolute fight against hunger, Federal Ministry of Food, Agriculture and Consumer Protection (Bonn) 19 January 2013. Date of Access: 8 February 2013.

⁶ The Common Agricultural Policy after 2013, Agriculture and Rural Development (Brussels) 7 June 2012. Date of Access: 15 February 2013.

http://ec.europa.eu/agriculture/cap-post-2013/.

Legal proposals for the CAP after 2013, Agriculture and Rural Development (Brussels) 12 October 2012. Date of Access: 15 February 2013.

http://ec.europa.eu/agriculture/cap-post-2013/legal-proposals/index_en.htm. 2278 The Common Agricultural Policy after 2013, Agriculture and Rural Development (Brussels) 7 June 2012. Date of Access: 15 February 2013.

http://ec.europa.eu/agriculture/cap-post-2013/.

Ministers to take stock of MEP's stance on CAP, European Voice (Brussels) 24 January 2013. Date of Access: 15 February 2013.

http://www.europeanvoice.com/article/imported/ministers-to-take-stock-of-meps-stance-oncap/76233.aspx.

²²⁸⁰ Political Agreement on New Direction for Common Agricultural Policy, European Commission (Brussels) 26 June 2013. Date of Access: 29 June 2013. http://europa.eu/rapid/press-release IP-13-613 en.htm.

sustainability and combat climate change. Between 2014 and 2020, over EUR100 billion will be invested to help farming meet the challenges of soil and water quality, biodiversity and climate change."²²⁸¹ The agreement includes linking direct payments to farmers using specific environmentally-friendly practices, and devoting at least 30% of rural development programmes' budgets to sustainable agriculture projects and practices.²²⁸²

Thus, the European Union is awarded a score of 0 for its sustainable agricultural policy reform commitments in support of the greater use of available technologies such as crop diversification, maintaining permanent grasslands, conserving areas of ecological interest, agri-environmental measures, supporting organic farming, and environmentally-friendly investment and innovation.

Analyst: Erin Singer Co-director of Compliance: Vera V. Gavrilova

²²⁸¹ Political Agreement on New Direction for Common Agricultural Policy, European Commission (Brussels) 26 June 2013. Date of Access: 29 June 2013.

http://europa.eu/rapid/press-release_IP-13-613_en.htm.

²²⁸² Political Agreement on New Direction for Common Agricultural Policy, European Commission (Brussels) 26 June 2013. Date of Access: 29 June 2013. http://europa.eu/rapid/press-release IP-13-613 en.htm.