



## **Going for Goal**

Immunisation and the Case for GAVI



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## **Scouting Reports**





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#### **ERRORS AND OMISSIONS**

This report was finalised on 5 May 2014. The information it contains was, to the best of our knowledge, current up until that date. We acknowledge that events occurring after this point may mean that some of the figures and commitments in this report are out of date. Any remaining errors are our sole responsibility.



## Acronyms & Definitions

#### **ACRONYMS**

AIDS: Acquired immune deficiency syndrome

**AMC:** Advance Market Commitment

**BCG:** Bacillus Calmette-Guérin vaccine; used to protect against tuberculosis

CSO: Civil society organisation

**DCVMN:** Developing Country Vaccine Manufacturers Network

DTP: Diphtheria-tetanus-pertussis vaccine

**DTP3:** The third and final booster of the DTP vaccine

EC: European Commission

**EPI:** Expanded Program on Immunization

EU: European Union

GAVI: Global Alliance for Vaccines and Immunisation (now commonly referred to as

the GAVI Alliance)

**GDP:** Gross domestic product

Hib: Haemophilus influenzae type b vaccine; used to protect against infections

caused by that bacteria, such as meningitis

**HPV:** Human papillomavirus

IFFIm: International Finance Facility for Immunisation

IFPMA: International Federation of Pharmaceutical Manufacturers & Associations

MAR: Multilateral Aid Review

MDG: Millennium Development Goal

**MMR:** Measles, mumps, and rubella vaccine **MNCH:** Maternal, newborn and child health

**MOPAN:** Multilateral Organisation Performance Assessment Network

**NGO:** Non-governmental organisation **ODA:** Official development assistance

**OPV:** Oral polio vaccine

**OPV3:** The third and final booster of the oral polio vaccine

PAHO: Pan American Health Organization

**TB:** Tuberculosis

**UNICEF:** United Nations Children's Fund

WHO: World Health Organization

#### **DEFINITIONS**

**ELIMINATION OF DISEASE:** A reduction to zero of a specified disease in a specific geographical area; however, a disease that has been eliminated can still re-emerge.

**ERADICATION OF DISEASE:** The permanent reduction to zero of a disease worldwide; a disease that has been eradicated cannot re-emerge.

**IMMUNISATION:** The process through which a person is made immune or resistant to a disease or infection, usually via the administration of a vaccine.

**TECHNOLOGY TRANSFER:** The transfer of all knowledge and technology necessary for the manufacture of a vaccine so that others are able to develop and manufacture the same vaccine. This leads to increased market competition and usually to lower prices.

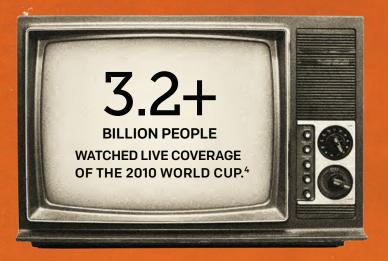
VACCINE: A substance which stimulates the body's immune system to protect against future infection or disease.

## 22 MILLION CHILDREN

did not receive the vaccines

they needed to keep them healthy last year.1





\$990 PER TICKET

for the best seats at the World Cup final<sup>2</sup> TICKET BOOK

With **less than \$2.50** for each of those viewers, GAVI could pay for all of its 2016–20 financing needs and help save the lives of more than **5 million children**.<sup>5</sup>

That amount could purchase **831 doses** of pentavalent vaccine, which protects against **five major killers** of children.<sup>3</sup>

The countries playing in the 2014 World Cup will **contribute 62%** of GAVI's resources for the 2011–15 period.6



\$330 MILLION
PROJECTED RISE IN
BEER SALES
AROUND THE WORLD CUP<sup>7</sup>



At the 2010 World Cup, more than **390,600 HOT DOGS** were sold at public catering concessions.

That's roughly equal to the number of children Ghana reached in its 2012 roll-out of GAVI-supported **pneumococcal** and rotavirus vaccines.<sup>10</sup>



## Introduction

very four years, football fans around the world reach fever pitch as the biggest of all international sporting events approaches – the World Cup. The tournament brings together footballers from around the globe to compete in what is known as "the beautiful game" and provides a platform on which teams from both the North and the South can compete on a level playing field. This year's World Cup, which takes place in Brazil from 12 June to 13 July, is sure to provide another dose of stunning shots, spectacular saves and a great outpouring of passion and pride.

At the same time, there is growing excitement this year around another beautiful game – and one that really is a matter of life and death: a global effort to immunise and protect millions of children. The urgent work to ensure that more children receive vaccines is rooted in a devastating reality: in 2012, an estimated 6.6 million children around the world died before reaching their fifth birthdays.¹ Nearly all of these deaths were due to preventable causes – diseases such as pneumonia and diarrhoea, which together kill more children each year than AIDS, tuberculosis (TB) and malaria combined.² Vaccines are widely recognised as being amongst the most cost-effective defensive weapons in helping to reduce the number of preventable child deaths, and yet today nearly one in five children around the world does not have access to these life-saving interventions.³ They do not have a shot at growing up to be the next Cristiano Ronaldo, Didier Drogba, Per Mertesacker or Mia Hamm.

The GAVI Alliance (GAVI) – a public-private partnership formed in 2000 – helps to ensure that more children can access the vaccines they need to stay healthy. As an alliance between national governments, donors, the private sector and technical health partners such as WHO and UNICEF, GAVI is able to draw on the unique skills of an entire team to ensure collaboration, innovation and results.

GAVI currently finances the purchase of vaccines in more than 70 of the world's poorest countries.<sup>4</sup> It provides support for the vaccines that fight many common and deadly infections: diphtheria, pertussis, tetanus, hepatitis B and Hib (delivered together through a vaccine called pentavalent); pneumococcal (pneumonia); rotavirus (diarrhoeal disease); measles; rubella; HPV (cervical cancer); yellow fever; meningitis A; polio; and Japanese encephalitis.<sup>5</sup> GAVI also provides financial support to strengthen countries' own immunisation programmes and broader health systems.

In a little more than a decade, the Alliance has had tremendous success in strengthening countries' immunisation programmes and saving children's lives. Through generous donor contributions, strengthened country co-financing and innovative financing streams, GAVI has supported the immunisation of 440 million children and has saved more than 6 million lives since 20006 – two victories worth cheering.

#### **HOW DOES GAVI SCORE ITS GOALS?**

GAVI achieves success through three tactics: raising money from donors, securing co-financing and ownership from governments in countries that are implementing immunisation programmes, and shaping vaccine markets to increase supply and reduce prices. Since 2000, donors have provided nearly two-thirds of GAVI's financing – more than \$6.2 billion as of December 2013<sup>7</sup> – through direct contributions, often via multi-year commitments. Of this total, roughly \$4.1 billion has come through donor governments, and the remainder through private and philanthropic sector channels. The remaining third of GAVI's overall resources has come through innovative financing channels. These include a front-loaded bond programme called the Innovative Financing Facility for Immunisation (IFFIm), which has secured \$6.3 billion in pledges over a 23-year period; an Advance Market Commitment (AMC), which has secured \$1.5 billion in upfront commitments to help incentivise the development of a pneumococcal vaccine; and a Matching Fund, designed to engage the private sector and raise \$260 million by the end of 2015.

An important and growing part of GAVI's financing comes through investments made by recipient countries. Since 2007, the Alliance has mandated that all recipients co-finance a portion of every dose of vaccine acquired through its support, with co-financing levels increasing as a country's ability to pay increases. <sup>12</sup> This process builds sustainability into countries' immunisation programmes, so that as they become wealthier, they simultaneously build the financial space into their budgets to help pay for immunisation costs on their own once they have graduated from GAVI support. In 2013, co-financing contributed roughly \$76 million towards GAVI's work; by 2020, that figure is set to grow sharply, generating as much as \$325 million annually. <sup>13</sup>

Finally, GAVI works actively to shape vaccine markets, with the aim of generating more suppliers and lower prices for vaccines. Through its engagement with the pharmaceutical industry, the Alliance has helped to encourage new vaccine suppliers, with half of its suppliers now based in Africa, Asia and Latin America, 14 to begin producing vaccines suitable for the world's poorest people. It has also helped to dramatically reduce the cost of many important vaccines; since 2010, for instance, the collective price of the pentavalent, pneumococcal and rotavirus vaccines has fallen by 35%.15

As a consistent winner, GAVI has received international attention and has become a favourite with development pundits. Recent multilateral aid reviews by the governments of Australia, 16 Sweden 17 and the United Kingdom, 18 as well as by the Multilateral Organisation Performance Assessment Network (MOPAN), 19 have all placed GAVI among the top performers in terms of value for money, organisational strengths and contribution to development. GAVI was also recently named the second most transparent aid programme by the Publish What You Fund index. 20

#### **GAVI'S NEXT MOMENT IN THE SPOTLIGHT**

Just as the World Cup kicks off, GAVI will enter into a tournament of its own: a new fundraising effort to scale up its work and save even more lives through immunisation. Fortunately, the Alliance is not starting from square one; it has proven that it can deliver results. For the 2011–15 period, GAVI has raised \$7.3 billion from donors and has projected that it could support the immunisation of nearly 250 million children, which would ultimately save the lives of nearly 4 million children. As of 2014, it remains on track – if not slightly ahead of schedule – to achieve both of these critical goals.<sup>21</sup>

Yet though GAVI is delivering on its promises, it cannot rest on its laurels. Many low-income countries have yet to roll out the full portfolio of vaccines that GAVI can support (some of which are new in recent years, or had previously been prohibitively expensive), and millions of babies are born around the world each year who need to be fully immunised against vaccine-preventable diseases.

Additionally, GAVI and its partners must place a greater focus in the years to come on ensuring equitable access to vaccines within countries already receiving

support. Reaching those children who are born into the poorest households or who live in the remotest places remains a critical challenge. Ensuring greater equity of access to vaccines and higher coverage rates cannot wait. We have seen time and time again that when children go unimmunised – regardless of where they live – outbreaks of infectious diseases such as measles and polio can quickly reverse years of progress, cause significant economic hardship and threaten the lives of others.

In order to sustain and continue scaling up its important work, GAVI needs to lay the foundations now for the challenges ahead. Over the course of the coming months, culminating in a replenishment summit hosted by the German government in early 2015, GAVI must secure renewed support from government donors, recipient countries, private sector partners and citizens for its work on immunisation.

Ultimately, GAVI must raise an additional \$7.5 billion from donors for the 2016–20 period – no small task, particularly in a tough economic environment. If GAVI can mobilise these resources, technical analysis shows that it could achieve what might seem to some like impossible goals: to immunise an additional 300 million children and to save more than 5 million additional lives.<sup>22</sup>

As we approach a replenishment year, then, the stakes are high for GAVI. Many questions remain: how will it secure the \$7.5 billion it needs to be successful? How can it work with countries to improve equitable access to vaccines for the poorest and most marginalised people? Which donors will step forward in a big way? Which countries have health systems that are most likely to deliver services for all their children?

In the following pages, ONE looks at the countries playing in this year's World Cup group by group through a series of country scouting reports and assesses their performance not on the football pitch but in the field of immunisation. Every four years, the World Cup brings unforgettable moments, with outstanding performances and missed chances, familiar faces and new stars. Through the scouting reports, we hope to showcase the similarly diverse spectrum of countries, from North to South, that are contributing meaningfully to global immunisation efforts – and we call on many of them to do more. For it is only when each of these countries delivers its best game in support of GAVI's critical work that every child, regardless of where he or she is born, can get a healthy start to life.



## About the Scouting Reports

long with every major tournament comes a barrage of pre-match coverage from pundits around the world. From TV commentators to casual fans on Twitter, everyone loves to offer their unique take, analysing a team's history, its players, its strengths and weaknesses and its chances of victory.

In that same spirit, we analyse the home country of each team participating in the 2014 World Cup to better understand their contributions to GAVI and immunisation to date and to make projections about their future.

For all countries, we assess a number of holistic indicators that signal their commitments to immunisation and health. These indicators include the most recent domestic coverage rates for the third dose of the diphtheria-tetanuspertussis (DTP3) vaccines, which public health officials consider to be a consistent standard and a good measure of the robustness of a country's immunisation programme. It is estimated that a 95% coverage rate for this and for many other vaccines is needed to prevent outbreaks of disease, but even many donor countries have not achieved this threshold. Because the ultimate goal of immunisation is to help reduce preventable deaths in children (in line with Millennium Development Goal 4, which aims for a two-thirds reduction in under-five death rates), we also include the latest data on the reduction in child mortality between 1990 and 2012 for low- and middle-income countries as an indicator of macro-level progress.

In addition, we include some details that are more specific to four different country categories:

Countries that are GAVI donors: For these countries (as well as some others that are not playing in the real World Cup but are significant GAVI contributors), we examine how much they have given to GAVI and in what forms. This includes direct contributions, as well as contributions to any of GAVI's three innovative financing mechanisms – the Advance Market Commitment (AMC), the International Financing Facility for Immunisation (IFFIm) and the Matching Fund. We also look at countries' relative per capita contributions and highlight

national leaders who have stepped forward to champion GAVI. Finally, because vaccine-preventable diseases can flare up anywhere in the world, we look at recent outbreaks and national commitments to ensure high rates of child immunisation.

High-income countries that are not yet GAVI donors: For these countries, we look at national commitments to domestic immunisation while also noting outbreaks of vaccine-preventable diseases. We note where countries have developed best practices or have pioneered technology transfer programmes for vaccines, and highlight leadership on child immunisation.

Non-GAVI middle-income countries: These countries are not eligible for GAVI support. As many are focused on strengthening their own health systems and routine immunisation programmes, we look at these countries' funding for the health sector as well as their progress in reducing child mortality. We also note instances of national leadership on immunisation and where they have developed best practices for vaccines.

Countries that are recipients of GAVI support: For these countries, we analyse the roles that both GAVI and domestic investments have played in ensuring improved immunisation efforts. We outline the types of support offered by GAVI in each country and profile national leadership in support of immunisation and child health. We also address national progress towards overcoming key challenges, such as ensuring equitable access to vaccines and addressing outbreaks of vaccine-preventable disease, as well as progress towards achieving MDG 4.

Finally, for all countries, we offer our verdict on the next five-year period with respect to financing for GAVI, strengthening of immunisation efforts and improvements in vaccine coverage and equity. We have made our predictions based on the information available and – as with the results of the World Cup itself – we look forward to seeing how these play out.

## **BRAZIL**



#### **GAVI DONOR**

**GDP** per capita: \$11,311

**Domestic DTP3 coverage:** 294%

GAVI commitments to date: 3 IFFIm: \$20 million (2014–33)

**GAVI** player since: 4 2006<sup>5</sup>

Although in 2006 Brazil pledged \$20 million to GAVI through IFFIm over the course of 20 years, legislative approval to fulfil this pledge was not obtained until 2011. The official contribution agreement between IFFIm, GAVI and Brazil is set to be signed this year, and the country's first contribution is set for 2014 as well.6 This commitment of \$20 million over 20 years averages out to less than a penny per Brazilian resident per year – far lower than what other donors are contributing.<sup>7</sup> Brazil's pharmaceutical companies have supported GAVI through the production of the vaccines. As a result of technology transfers, Brazilian members of the Developing Country Vaccine Manufacturers Network (DCVMN) such as Bio-Manquinhos/Fiocruz and Instituto Butantan now produce various low-cost vaccines. including the pneumococcal, rotavirus and influenza vaccines, which allows for greater value for money.8 The Oswaldo Cruz Foundation (Fiocruz), Brazil's leading medical research facility, has also begun producing a low-cost measles and rubella vaccine through a partnership with the Bill & Melinda Gates Foundation.9 However, Brazil has struggled over the past few years with about 200 vaccine-preventable outbreaks domestically. Many of the patients have been unimmunised children and adults, which demonstrates the need for universal vaccination.<sup>10</sup>

#### **Pundits' verdict**

Brazil should sign the official agreement to start contributing to IFFIm and make good on its \$20 million pledge, while increasing its commitment for the 2016–20 period as its economy grows.

## **CAMEROON**



#### **GAVI RECIPIENT**

**GDP** per capita: \$1,271

**Domestic DTP3 coverage:** 285%

Child mortality rate: 395 deaths per 1,000 live births

Decline in child mortality since 1990:4 30%

GAVI player since: 2001

Amount received from GAVI: \$121.5 million

Cameroon currently receives GAVI support for six vaccines as well as for health systems strengthening and vaccine-specific operational costs. <sup>7</sup> The country also received GAVI funding to introduce HPV vaccine<sup>8</sup> demonstration projects<sup>9</sup> in 2014.<sup>10</sup> Despite a good overall partnership, however, the Alliance's oversight processes raised concerns that between 2007 and 2010 a sum of up to \$3.1 million had been misused. Investigations began in 2011, with \$1.8 million of the total amount under investigation for theft. GAVI has since reported that Cameroon's Ministry of Health fully cooperated with the investigation and committed to reimbursing GAVI for the funds as needed. To date, 61% has been reimbursed. Cameroon is one of 15 pilot countries participating in the Sabin Vaccine Institute's Sustainable Immunization Financing initiative.<sup>12</sup> Equity in immunisation is gradually increasing in the country, with 75% of districts achieving a DTP3 coverage rate of 80% in 2012, up from 66% in 2011. At the same time 25% of districts reported coverage rates of between 50% and 79%, an improvement from 33% in 2011, and only 1% reported a coverage rate of less than 50%.13 Ensuring the control and elimination of polio is another challenge. Cameroon eliminated the disease in 2009 but saw it re-emerge in 2013, when four cases were reported. 14 So far in 2014, another three cases have been detected, and WHO has warned of a high risk of further spread as neighbouring Nigeria still has endemic polio.15

#### **Pundits' verdict**

With Cameroon off track to reach MDG 4, it should focus on immunising more of its children – particularly with the rotavirus and pneumococcal vaccines – since deaths from pneumonia and diarrhoea make up more than a quarter of all child deaths. It should also continue to encourage take-up of the polio vaccine, as the disease remains endemic in nearby Nigeria.

## **CROATIA**



#### **NON-GAVI HIGH-INCOME COUNTRY**

**GDP** per capita: \$13,562

Domestic DTP3 coverage: <sup>2</sup> 96% GAVI commitments to date: None

All vaccines listed in Croatia's Childhood Vaccination Programme are mandatory for all children and are provided free of charge by the government, which historically has obtained them at low cost through its national vaccine manufacturer, the Institute of Immunology in Zagreb. The Institute produces nearly every vaccine required by Croatia's national immunisation schedule, including diphtheria, tetanus, pertussis, polio, measles and mumps. Such reliable, low-cost access has helped to virtually eliminate most vaccine-preventable diseases, and Croatia has not reported any outbreaks in recent years. However, the Institute is now struggling after losing two licences due to inadequate safety infrastructure, and the future of a third licence – to make viral vaccines – is now in question. These changes could have enormous ramifications for Croatia's access to vaccines, which is heavily reliant on the Institute. Furthermore, because it has exported vaccines to other countries and has provided knowledge for other pharmaceutical companies, this is likely to have consequences for access to immunisation beyond Croatia.

#### **Pundits' verdict**

Although Croatia's high immunisation rates and low number of outbreaks are commendable, the Institute of Immunology's recent struggles are worrying as they could have a very detrimental effect on future access to vaccines.

## **MEXICO**



#### **NON-GAVI MIDDLE-INCOME COUNTRY**

**GDP per capita:** \$10,630

**Domestic DTP3 coverage:** 299%

Portion of budget spent on health: 15.82%

Child mortality rate: 4 16 deaths per 1,000 live births

**Decline in child mortality since 1990:** 65%

To date, Mexico has not made any GAVI contributions, though it has supported child immunisation in other ways. As the recipient of a technology transfer for the oral polio vaccine, Laboratorios de Biológicos y Reactivos de México (BIRMEX) has helped to greatly reduce this vaccine's cost.6 The country has also made great strides in its domestic immunisation programme and provides a good example of how increased levels of immunisation can reduce child deaths. Before Mexico began including rotavirus in its routine childhood immunisation programme, about 1,800 children aged under five died annually from diarrhoea. After the vaccine was introduced in 2007, these numbers quickly dropped to about 800 deaths a year by 2011. This trend has been maintained across different regions and socioeconomic groups, thanks to high levels of access for all income levels and geographic regions.<sup>7</sup> Nevertheless, coverage is not universal, with just twothirds of the country's municipalities reporting a 95% DTP3 coverage rate.8 Mexico has had fewer measles outbreaks than many of its neighbours, with no cases reported between 2005 and 2011, a handful in 2011 and none since then.9 However. it has seen almost 1,000 cases of whooping cough in the past year alone, further demonstrating the importance of full immunisation for all vaccines.<sup>10</sup>

#### **Pundits' verdict**

As Mexico's domestic immunisation programme improves and as its economy continues to grow, it ought to join the club as a GAVI donor this year.

## **AUSTRALIA**



#### **GAVI DONOR**

**GDP** per capita: \$64,863

**Domestic DTP3 coverage:** 292%

GAVI commitments to date: \$228.8 million/IFFIm: \$255.5

million (2011-30)

GAVI player since: 4 2006

At the 2011 GAVI conference, Australia showed strong support by pledging \$200 million in direct contributions and \$274.2 million overall between 2011 and 2015 – close to \$2.50 per Australian each year and higher than the average donor's per capita pledge. Fas part of its commitment to increase funding for multilateral organisations that are both effective and relevant to its aid objectives, the government has assessed the performance of a variety of multilateral groups through its Australian Multilateral Assessments (AMAs). The 2012 AMA gave GAVI top scores in all seven of its categories and praised it for being able to demonstrate consistent and strong achievements. Domestically, more focus is needed as Australia has had more than 22,000 cases of measles, whooping cough and mumps in the past few years – one of the highest numbers of any donor country.

#### **Pundits' verdict**

Australia's ODA budget has been subject to cuts and its priorities are likely to shift in this year's budget. However, for the 2016–20 period Australia should prioritise its investments in GAVI and pledge \$100 million per year or more through either direct contributions or a longer-term IFFIm commitment, especially as the Alliance has received high marks in the AMA report.

## **CHILE**



#### **NON-GAVI HIGH-INCOME COUNTRY**

**GDP per capita:** \$15,776

Domestic DTP3 coverage: <sup>2</sup> 90% GAVI commitments to date: none

Despite being a high-income country with a per capita GDP greater than that of neighbour and current GAVI donor Brazil, Chile has yet to commit to contributing to GAVI.<sup>3</sup> Domestically, its vaccine coverage rate remains relatively low, which is partly explained by inequity across geographical districts. Fewer than half of the country's districts have a DTP3 coverage rate of 80% or more, and just 27% have a coverage rate of 95%. 4 The country has seen more than 600 outbreaks of whooping cough as well as measles outbreaks in the past few years. Notably, however, in 2010 no outbreaks were detected in the immediate aftermath of an 8.8 magnitude earthquake, despite general disruptions to health systems.<sup>5</sup> A threat to existing vaccine programmes was recently posed by the Chilean Congress when it passed a ban on thiomersal, a chemical used as a preservative in many vaccines, even though many studies have shown that it does not have negative effects on health. The ban was vetoed by the president. If it had been approved, it would have had a negative impact on access to vaccines, since most contain this chemical.6 More positively, Chile is in the process of introducing a national online vaccination registry, which could improve surveillance mechanisms and convenience for patients.7

#### **Pundits' verdict**

As it transitions into becoming a high-income country, Chile should prioritise strengthening its domestic immunisation program by improving equity in vaccine access.

### **NETHERLANDS**



#### **GAVI DONOR**

**GDP** per capita: \$47,634

**Domestic DTP3 coverage:** 297%

GAVI commitments to date: 3 Direct: \$378.9 million/IFFIm:

**\$111 million (2009–16) GAVI player since:** 4 **2001** 

As one of GAVI's original six donor countries, the Netherlands has been a consistent supporter throughout the Alliance's history, contributing both directly and through IFFIm. Between 2011 and 2015, the Dutch contribution was the ninth highest of all public donors and averaged out to about \$2 per resident per year. However, the Dutch government and public health officials must work harder to combat anti-vaccination beliefs and domestic outbreaks. In particular, more than 2,000 cases of measles were reported across the country last year. At least 91% of those infected were children and adults who had not been vaccinated, mostly due to religious convictions.

#### **Pundits' verdict**

In spite of drastic cuts to the Dutch development budget, the Minister for International Trade and Development announced in March 2014 that she intends to maintain funding levels for GAVI over the next five-year period. As GAVI's work is core to one of the Netherlands' four priority areas for development cooperation, the country is well placed to improve on its 2011 performance.

## **SPAIN**



#### **GAVI DONOR**

**GDP** per capita: \$29,150

**Domestic DTP3 coverage:** 97%

GAVI commitments to date: 3 Direct: \$43.2 million/IFFIm: \$234.9

million (2006–25)
GAVI player since: 4 2006

In 2006 Spain helped found IFFIm and has since been a key supporter.<sup>5</sup> However, the Spanish government's support for GAVI remains low compared with other donors, due at least in part to ongoing financial hardships at the national level. The country's \$41.2 million pledge for 2011–15 provided only 0.06% of GAVI's overall funding for that period and averages out to just a few cents per Spanish resident per year.<sup>6</sup> Meanwhile, work by "la Caixa" Foundation complements the government's commitments. In 2008, it became the first private European foundation to support GAVI.<sup>7</sup> The soccer club Atlético Madrid began working with "la Caixa"'s Business Alliance for Child Vaccination in 2012 to promote the involvement of Spanish companies in immunisation.<sup>8</sup> Domestic vaccination came to the forefront in 2011, when Spain saw some of Europe's biggest outbreaks of measles. Cases were spread across the country, and more than 3,800 people were infected. Cases of mumps and rubella have also emerged across Spain in recent years.<sup>9</sup>

#### **Pundits' verdict**

Given the dramatic cuts to Spain's aid budget, there is a risk that its performance in the next pledging period will slip. But the country still has time to get into shape and should continue to fulfil its IFFIm pledge while also considering a new direct contribution commitment in the order of \$5 million per year.

## COLOMBIA



#### **NON-GAVI MIDDLE-INCOME COUNTRY**

**GDP** per capita: \$8,098

**Domestic DTP3 coverage:** 92%

Portion of budget spent on health: 18.53%

Child mortality rate: 4 18 deaths per 1,000 live births

**Decline in child mortality since 1990:** 50%

Colombia has seen thousands of cases of whooping cough in the past few years, including more than 3,000 in 2012 alone. 6 Most deaths have been among unimmunised babies of less than a year old whose immune systems were poorly equipped to fight the disease.<sup>7</sup> The country has also seen outbreaks of measles and mumps in recent years,8 including an outbreak of six measles cases in 2011 that spurred a massive vaccination drive by the government to immunise more than 8 million people. In 2012, the Pan American Health Organization (PAHO) undertook a comprehensive evaluation of the WHO-led Expanded Program on Immunization (EPI) in Colombia. 10 The findings were generally positive: Colombia's EPI has been more effective in recent years, having established campaigns to fight vaccine-preventable diseases such as yellow fever and rubella, improved surveillance mechanisms and created a national technical advisory group on immunisation. However, the evaluation also noted a trend of decreasing coverage rates for many vaccines. Although the national DTP3 immunisation rate remains high, this coverage is not equally distributed. As of 2012, only 76% of Colombia's districts had a DTP3 coverage rate of at least 80%, and just 40% had a coverage rate of 95%.11

#### **Pundits' verdict**

Colombia should prioritise improving its national DTP3 immunisation rate by ensuring universal access to vaccines so that all districts have a coverage rate of 95%.

#### **GAVI RECIPIENT**

GDP per capita: \$1,175

**Domestic DTP3 coverage:** 294%

Child mortality rate: 108 deaths per 1,000 live births

Decline in child mortality since 1990:4 29%

GAVI player since: 2001

Amount received from GAVI: 551.2 million

In late 2010 and early 2011, Côte d'Ivoire saw post-electoral fighting that displaced about 200,000 people and disrupted the functioning of health centres in the worst-affected regions. This derailed immunisation efforts and caused flare-ups of vaccine-preventable diseases; in particular, the country saw three cases of polio in 2011. Immunisation drives have been revived post-conflict, including a plan for a nationwide measles vaccination campaign in November 2014. DTP3 coverage has increased, from 62% in 2011 to 94% in 2012. Equity in access to vaccines has also improved through additional vaccination activities, with 93% of districts reporting a DTP3 coverage rate of 80% or more in 2012 – up from 14% just a year earlier. The remaining 7% of districts reported coverage rates of between 50% and 79% in 2012. However, as part of the "wild poliovirus importation belt" – a band of countries often re-infected with polio from Nigeria – Côte d'Ivoire remains vulnerable to polio outbreaks despite having eliminated the disease itself. In all, the country receives GAVI support for three vaccines, as well as for health systems strengthening and vaccine-related support.

#### **Pundits' verdict**

Côte d'Ivoire is not on track to reach MDG 4, but its rapid increase in post-conflict immunisation rates is very impressive. An acceleration of this progress can help the country save more lives and get closer to reaching MDG 4.



#### NON-GAVI HIGH-INCOME COUNTRY

**GDP** per capita: \$21,857

Domestic DTP3 coverage: 299% GAVI commitments to date: none

Greece previously had the second highest baby and toddler immunisation rates among wealthy countries for polio, measles and DTP3.<sup>3</sup> One factor that drove these historically high rates in the past was the requirement that children must be vaccinated to attend school.<sup>4</sup> However, the situation has deteriorated since the country's financial crisis began. Vaccines are traditionally paid for by the state insurer or by private insurance – usually provided by employers – making them free for families. With the state insurer heavily indebted, many clinics are now accepting only private insurance, but with the country facing high unemployment many parents have lost this benefit and public health officials report that thousands of children are unimmunised.<sup>5</sup> Some volunteer clinics are offering free vaccinations in an attempt to close the gap.<sup>6</sup> Partly as a result of reduced access to vaccines, Greece has seen more than 100 measles cases in the past few years. Although these numbers are lower than those seen in many neighbouring countries, they still represent some of Greece's largest recent outbreaks.<sup>7</sup>

#### **Pundits' verdict**

Greece's development budget is under enormous pressure with many conflicting priorities, but the government should prioritise GAVI and child immunisation as an important and effective intervention.

## **JAPAN**



#### **GAVI DONOR**

**GDP** per capita: \$38,491

**Domestic DTP3 coverage:** 298%

GAVI commitments to date: 3 Direct: \$27.5 million

**GAVI** player since: 4 2011

Japan's commitments to GAVI remain far lower than those of many other donors. Its 2011–15 commitment of \$27.5 million represents just 0.4% of all donor contributions and averages out to just a few cents per Japanese resident per year – a much lower level of per capita spending than other donors. However, given the domestic challenges the country faced following the 2011 earthquake and tsunami, the fact that it still made a pledge in 2011 and followed through with contributions is laudable. The Japanese people have directly helped to support IFFIm by buying vaccine bonds, helping to raise about half of the programme's total funding. Domestically, Japan has struggled with outbreaks of vaccine-preventable disease. The country banned the MMR vaccine in 1993 and dropped the requirement for children to be vaccinated against measles and rubella before entering school. Although individual measles and rubella vaccines are still available and are part of Japan's immunisation schedule, this move has led to a sharp rise in measles cases and deaths, with nearly 100 people dying of the disease in the years immediately following implementation of the ban.

#### **Pundits' verdict**

Japan should contribute more per capita and as a portion of overall GAVI funding by pledging upwards of \$50 million per year between 2016 and 2020.

# COSTA RICA

#### **NON-GAVI MIDDLE-INCOME COUNTRY**

**GDP** per capita: \$10,433

**Domestic DTP3 coverage:** 291%

Portion of budget spent on health: 27.65%

Child mortality rate: 4 10 deaths per 1,000 live births

Decline in child mortality since 1990: 41%

Costa Rica has had success in preventing major outbreaks of diseases in recent years, with the one exception being a few cases of whooping cough in 2013.6 Much of this success can be attributed to the government prioritising its goal of improved vaccination rates. In 1991, the country set a goal of eliminating measles: after widespread, aggressive catch-up immunisation campaigns and improved surveillance, measles cases dropped from more than 8,000 in 1991–92 to virtually none from 1999 onwards. The government ran another campaign for rubella a few years later, which saw similar success.7 In the years since, the country's universal health insurance programme and government leadership have helped to create widespread access to vaccinations, By 2008, 91% of Costa Rican children had been immunised for all antigens, 8 though progress towards full immunisation across the country has been lagging. In 2012, just 46% of municipalities reported DTP3 coverage of 95%.9 Former Costa Rican president Dr. Oscar Arias Sanchez has been a proponent of immunisation, both while in office and afterwards. As president, in addition his general support for vaccines, he issued an executive decree to create a national committee responsible for documenting the elimination of measles and rubella in the country. 10 To further improve surveillance, the government is currently rolling out a national vaccine registry.<sup>11</sup>

#### **Pundits' verdict**

Costa Rica has made great strides in its immunisation programme, but it is not on track to reach MDG 4 and is also lagging behind in equitable access to vaccines. Over the coming years, it should step up its game by ensuring that all districts have a DTP3 vaccination rate of 95%.

## UNITED KINGDOM (ENGLAND)\*



\* While England made the World Cup, the whole of the UK (including Scotland, Wales and Northern Ireland) contributes to GAVI, as recognised in this report.

#### **GAVI DONOR**

**GDP** per capita: \$39,567

**Domestic DTP3 coverage:** 297%

GAVI commitments to date: \$1.5 billion (to 2016)/AMC: \$485 million (2010–18)/IFFIm: \$2.93 billion (2007–29)/Matching

Fund: \$80.5 million GAVI player since: 4 2001

The UK hosted GAVI's 2011 replenishment conference in London. By investing significant political leadership in the lead-up to the conference, it encouraged donors to pledge an additional \$4.3 billion for the period up to 2015, more than meeting GAVI's \$3.7 billion funding gap. The UK itself has contributed more to GAVI than any other donor, providing \$2.3 billion - or 31.6% of all contributions - in the 2011-15 period alone, while also incentivising private sector contributions through the Matching Fund in partnership with the Bill & Melinda Gates Foundation.<sup>5</sup> Part of the country's strong enthusiasm for GAVI can be attributed to the Alliance's outstanding return on investment: the UK's 2011 Multilateral Aid Review (MAR) found that GAVI provides "very good value for money for UK Aid". A 2013 MAR update reinforced this finding, stating: "GAVI continues to be a high performing institution providing a very cost-effective health intervention."6 Domestically, more than 14,000 cases of measles, mumps, rubella, diphtheria and whooping cough have been recorded in recent years;<sup>7</sup> public health officials have attributed most of these outbreaks to parents not vaccinating their children.8 As measles cases have spread across Europe, the UK's immunisation rate has increased, but it remains short of the 95% coverage necessary to prevent outbreaks of the disease.9

#### **Pundits' verdict**

With so much demonstrated enthusiasm for GAVI to date, the UK ought to maintain its strong commitment to the Alliance and remain an important champion.

### **ITALY**



#### **GAVI DONOR**

**GDP** per capita: \$34,715

**Domestic DTP3 coverage:** 2 97%

GAVI commitments to date: \$\frac{1}{2006-25} / AMC:

\$635 million (2008–19) GAVI player since: 4 2006

Italy has provided crucial support for GAVI's AMC and IFFIm programmes. It played a leading role in the launch of the AMC and is the programme's largest donor, having committed 38% of its entire funding during the 2011–15 period. Italy was also a founding member of IFFIm and is its third largest contributor. For the 2011–15 period, Italy pledged nearly \$500 million, accounting for more than 6% of total proceeds to GAVI; this translates into roughly \$1.50 per Italian resident per year, a per capita contribution rate that is about average among GAVI donors. However, domestic sentiments against vaccination still exist and probably played a role in a measles outbreak in 2011. In that year 5,000 people were infected, more than 95% of whom were unvaccinated or incompletely vaccinated.

#### **Pundits' verdict**

With an increase in Italy's aid levels, the country ought to make a significant increase in GAVI funding. The government could make its first nominal direct contribution while also increasing its IFFIm contributions.

## **URUGUAY**



#### **NON-GAVI HIGH-INCOME COUNTRY**

**GDP** per capita: \$16,609

Domestic DTP3 coverage: 295% GAVI commitments to date: None

Uruguay has experienced few disease outbreaks recently, with no cases of measles, mumps or rubella (MMR) reported for several years. Much of this success can be attributed to the country's high MMR coverage rate: in 2012, 96% of its municipalities had a rate of 95% or more. Coverage for other vaccines also remains strong, with all districts reporting a DTP3 coverage rate of at least 80%, and 89% reporting a coverage rate of 95%. However, outbreaks of whooping cough remain a concern, with the country reporting nearly 600 cases in 2013 alone. Recently, Uruguay has introduced a novel method of increasing the coverage of the HPV vaccine by offering it in health centres within the framework of more holistic, routine sexual health programmes. This is a unique approach and one that could prove particularly effective, as integrating new vaccines into routine programmes often helps to expedite uptake. Unlike most neighbouring countries, Uruguay has been using a national vaccination registry for a few years, which allows for improved information sharing and better monitoring of vaccination needs.

#### **Pundits' verdict**

Uruguay has seen great success in recent years, and it will go far if it continues on its current trajectory. However, whooping cough remains a concern, and improved monitoring and control of the disease are needed.

## **ECUADOR**



#### **NON-GAVI MIDDLE-INCOME COUNTRY**

GDP per capita: \$5,968

**Domestic DTP3 coverage:** 299%

Portion of budget spent on health: 7.07%

Child mortality rate: 23 deaths per 1,000 live births

Decline in child mortality since 1990: 58%

Even though Ecuador has made the provision of universal access to immunisation a mandatory government obligation in the past few years, equity in terms of access to vaccines remains relatively low.<sup>6</sup> Just two-thirds of the country's municipalities reported an MMR coverage rate of 95% in 2012, though Ecuador fared better on DTP3, with 86% of municipalities reporting a 95% coverage rate.<sup>7</sup> Perhaps as a result of low MMR coverage, the country has struggled with outbreaks, reporting several hundred cases in recent years.<sup>8</sup> The vast majority of recent cases have occurred in regions with large numbers of indigenous people who have not been immunised.<sup>9</sup> To help improve access to immunisations, Ecuador participates in the PAHO Revolving Fund, a mechanism for joint procurement of vaccines, as well as syringes and other necessary devices.<sup>10</sup> The country's Secretary of Health, Dr. Patricio Jamriska, has been a key advocate of immunisation. Among his best-known actions is submitting the original proposal for "Vaccination Week in the Americas", the world's first regional immunisation week, following a 2002 measles outbreak in Venezuela and Colombia.<sup>11</sup>

#### **Pundits' verdict**

While Ecuador has had remarkable success in ensuring universal immunisation, more focus is needed on controlling outbreaks. In particular, the government should work to improve immunisation rates amongst all ethnic groups.

## **FRANCE**



#### **GAVI DONOR**

GDP per capita: \$43,000

**Domestic DTP3 coverage:** 299%

GAVI commitments to date: 5 Direct: \$153.7 million/IFFIm: \$1.69

billion (2007-26)

GAVI player since: 4 2004

France is IFFIm's second largest donor. Between 2011 and 2015, it contributed a quarter of all IFFIm funding, providing crucial support for the programme. 

Its 2011–15 direct contributions and IFFIm commitments together total \$432.4 million, or about 6% of all GAVI funding. However, this averages out to only slightly more than a dollar per French resident per year and puts the country at the lower end of per capita contributions. France has also seen Europe's worst outbreaks of measles in recent years, with more than 15,000 cases. The vast majority of these occurred in 2011, when there were about 14,000 cases across the country, concentrated among older children and adults who were either unvaccinated or whose vaccination history was unknown.

#### **Pundits' verdict**

France is a leader in global health, and it can maintain this leadership by, at a minimum, renewing its current direct contribution levels for the next five years while also increasing its IFFIm commitments.

## **HONDURAS**



#### **GAVI RECIPIENT**

**GDP** per capita: \$2,323

**Domestic DTP3 coverage:** 288%

Child mortality rate: 23 deaths per 1,000 live births

Decline in child mortality since 1990: 61%

GAVI player since: 2004

Amount received from GAVI: \$29.0 million

Honduras has made enormous strides in its child vaccination programmes and was recognised for this with the Best Performance Award at the 2012 GAVI Alliance Partners' Forum. 1 Its introduction of the rotavirus vaccine was particularly impressive: it began rolling out the vaccine in 2009 and by 2012 had achieved 98% coverage.8 It is the second Central American country to include rotavirus and pneumococcal vaccines in its national immunisation schedule.9 In addition to support for these vaccines. GAVI provides Honduras with support for health systems strengthening. 10 One initiative that has helped ensure high levels of coverage is the mandatory review of children's vaccination cards before school enrolment. The families of children with up-to-date cards receive a monetary reward, providing many impoverished families with an extra incentive to vaccinate.<sup>11</sup> Last year, the country had no outbreaks of vaccine-preventable diseases and in previous years there were only a handful. This is particularly impressive since about half of rural areas lack a reliable electricity supply, which is necessary to keep vaccines cold.<sup>12</sup> Power for the cold chain is ensured through partnerships between the Honduras government and NGOs, which work together to provide solar panels for back-up power.<sup>13</sup> Still, geographic equity in access to vaccines remains low: as of 2012, only 28% of municipalities had achieved a DTP3 coverage rate of 95%, and only 55% an MMR coverage rate of 95%.14

#### **Pundits' verdict**

Honduras has demonstrated consistent success in immunisation programmes, which has helped keep the country on track for reaching MDG 4. However, concerns remain around its relatively low and inequitable DTP3 coverage rates. The country should focus on improving coverage among citizens in all municipalities.

## **SWITZERLAND**



#### **NON-GAVI HIGH-INCOME COUNTRY**

**GDP per capita:** \$81,324

Domestic DTP3 coverage: 295% GAVI commitments to date: none

The Swiss city of Geneva hosts the headquarters of many global health institutions – including those of GAVI and WHO – and the country contributes official development assistance, but it has yet to contribute to GAVI. However, Switzerland has supported immunisation in other ways. In particular, the Swiss Serum and Vaccine Institute (since acquired by Crucell) was the first company to license a live oral typhoid vaccine, a crucial immunisation for protection against typhoid fever.<sup>3</sup> Domestically, Switzerland has struggled with cases of vaccine-preventable diseases, including widespread outbreaks of measles in recent years. A study on a cluster of cases in Geneva in 2011 revealed that most measles patients were young adults, almost 90% of whom had never been vaccinated or had been incompletely immunised.<sup>4</sup> The president of Switzerland's Federal Vaccination Commission has estimated that in addition to a domestic anti-vaccination movement, another 15% of the population is unsure of the benefits of vaccination. As a result, Switzerland's MMR immunisation rate is below 95% among children, the threshold deemed necessary to prevent regular outbreaks.<sup>5</sup>

#### **Pundits' verdict**

Switzerland should step up and become a GAVI donor for the first time for the 2016–20 replenishment period, especially given its high GDP per capita and its contributions to other global health mechanisms such as the Global Fund.

## **ARGENTINA**



#### **NON-GAVI MIDDLE-INCOME COUNTRY**

**GDP** per capita: \$11,766

**Domestic DTP3 coverage:** 291%

Portion of budget spent on health: 22.46%

Child mortality rate: 4 14 deaths per 1,000 live births

Decline in child mortality since 1990: 48%

Argentina has one of the most comprehensive immunisation schedules in the world, with 16 vaccines including polio, BCG for TB, and HPV.6 Ability to pay has little relevance as vaccination is mandatory and is provided free of charge across the country.7 Nevertheless, Argentina has low geographic equity of immunisation: only 45% of its municipalities reported a DTP3 coverage rate of 95% in 2012.8 Its MMR equity is slightly higher but still low, with 53% of municipalities reporting 95% coverage. The country has seen thousands of whooping cough cases in recent years, along with a few cases of measles.9 Although anti-vaccination sentiment is not strong, many doctors are blaming an overall increase in scepticism about vaccines for playing a role in some of these outbreaks.10 Argentina was one of the first countries to roll out the HPV vaccine and to make it mandatory for all girls. To help pay for the vaccine, the country participates in the PAHO Revolving Fund, a mechanism that keeps prices low through joint procurement of vaccines and delivery devices such as syringes.11

#### **Pundits' verdict**

Argentina's comprehensive immunisation schedule is impressive, but recent outbreaks are concerning. The government should take extra steps to control these while also improving equity in access.

## BOSNIA AND HERZEGOVINA



#### **FORMER GAVI RECIPIENT**

**GDP** per capita: \$4,598

**Domestic DTP3 coverage:** 2 92%

Child mortality rate: 3 7 deaths per 1,000 live births

Decline in child mortality since 1990:4 64%

GAVI player since: 2002

Amount received from GAVI: 52.3 million

Beginning in 2002, Bosnia and Herzegovina used GAVI support to help improve its immunisation coverage rates, which had been weakened by civil war. As the country's GNI rose over the course of the decade, its relationship with GAVI also changed; it made its final request for GAVI support in 2008 and received its final tranches of funding in 2010. Since then, geographical equity in access to vaccines has remained relatively high. In 2011, 94% of districts reported a DTP3 coverage rate of 80% or more and the remaining 6% reported coverage rates of between 50% and 79%.<sup>7</sup> A challenge for Bosnia and Herzegovina includes its governmental structure: it effectively has three ministries of health in addition to cantonal governments that oversee health issues, and these bodies often do not coordinate sufficiently.8 No national census has been conducted in more than 20 years, making it difficult to predict accurately the number of vaccines needed, and disruptions in vaccine supply have occurred. 9 Sentiments against vaccination are also strong. 10 In 2010, the country had an outbreak of 1,900 cases of rubella, about half of whom were unvaccinated individuals. Later that year and into 2011, the country also saw a large mumps outbreak, with 5,261 cases. A unique aspect of this outbreak was that 15-19-year-olds and 20-29-year-olds were most affected - those who had been children during the Bosnian War and had probably never received immunisation due to disruptions in the health system.<sup>12</sup>

#### **Pundits' verdict**

Bosnia and Herzegovina is on track to reach MDG 4, but the government should better encourage full immunisation across the country to expedite progress. In addition, increased surveillance for detecting vaccine-preventable disease could help prevent future large outbreaks. Catch-up immunisation campaigns may also be worthwhile given the demographics of recent outbreaks.

### **IRAN**



#### NON-GAVI MIDDLE-INCOME COUNTRY

**GDP** per capita: \$4,751

**Domestic DTP3 coverage:** 299%

Portion of budget spent on health: 3 15.41%

Child mortality rate: 4 18 deaths per 1,000 live births

Decline in child mortality since 1990: 69%

Iran has high levels of geographic equity in immunisation, with every one of its districts reporting a DTP3 immunisation rate of at least 80%. Much of this can be attributed to the requirement for parents to show proof that their children are fully immunised before entering school. In addition, immunisation enjoys relatively high support among Iranians, with 93% of mothers having a favourable view. However, measles has been a consistent challenge in the country, leading the government to implement a targeted measles control plan in the late 1990s. In 2001, Iran formally adopted the regional goal of eliminating measles by 2010. However, despite high vaccination rates and much improved surveillance mechanisms, Iran had a large measles outbreak in 2009–10 that involved 126 infections. More than 40% of the cases were adults and children over the age of seven and, interestingly, most of these individuals had been immunised. This led some scientists to recommend the implementation of a supplementary immunisation programme for adults.

#### **Pundits' verdict**

Iran's high levels of vaccination coverage are commendable, and its continued support for immunisation in the years to come ought to help avoid any future outbreaks of vaccine-preventable disease.

### **NIGERIA**



#### **GAVI RECIPIENT**

**GDP** per capita: \$1,6922

**Domestic DTP3 coverage:** 41%

Child mortality rate: 4 124 deaths per 1,000 live births

Decline in child mortality since 1990:5 42%

GAVI player since: 2001

Amount received from GAVI:7 \$309.3 million

In 2012, Nigeria launched its "Saving One Million Lives" initiative, which outlines ways to increase access to health services for women and children and to save a million lives by 2015. One of its goals is to improve routine immunisation and reach an 87% coverage rate for DTP3 and OPV3.8 However, current rates are extremely low: Nigeria's DTP3 vaccination rate of 41% is the lowest of any country where data is available. Access to immunisation also remains uneven across the country, with coverage particularly low in northern areas, and discrepancies appear to be worsening. In 2012, just 15% of districts reported a DTP3 coverage rate of 80% or more. Meanwhile, 42% of districts reported a coverage rate of less than 50%, a deterioration from the previous year when only 33% of districts fell into this category. Nigeria is also one of three countries worldwide where polio remains endemic, with 53 cases in 2013, and its OPV3 coverage rate of 59% is one of the lowest in the world. 10 Efforts to vaccinate children have been hindered by the migration of nomadic populations and by mistrust of vaccines, which has even led to violence towards vaccination workers. More recently, the country has attempted to address bottlenecks and weaknesses in its routine immunisation services through the development of its National Routine Immunisation Strategic Plan 2013–2015.12 From GAVI, the country receives support for five vaccines - including meningitis, pentavalent and yellow fever - as well as for health systems strengthening and vaccine-specific operational costs.<sup>13</sup> Nigeria is also one of 15 pilot countries participating in the Sabin Vaccine Institute's Sustainable Immunization Financing initiative.14

#### **Pundits' verdict**

Nigeria's low immunisation rates and weak health systems are concerning, and the country is not on track to reach MDG 4. The government should significantly increase efforts to reach the goals outlined in its Saving One Million Lives initiative, as well as MDG 4. This will require strengthened support from GAVI, as well as political leadership and domestic funding from Nigeria itself.



#### **GAVI DONOR**

GDP per capita: \$44,999

Domestic DTP3 coverage: 93%

GAVI commitments to date: Direct: \$210.8 million

GAVI player since: 2006

Germany hosted the April 2014 GAVI board retreat and has agreed to host the Alliance's replenishment conference in early 2015 – roles that indicate the country's strong support for GAVI, particularly in the face of very limited overall growth in the government's development assistance budget. These moves are especially positive in the lead-up to 2015, a year in which Germany will convene world leaders in hosting the G8 Summit. However, some of the country's recent commitments are not as strong. Its 2011–15 contribution of \$188.8 million represents less than \$0.50 per German resident per year, an amount far lower than the per capita contributions of its peers. Domestically, Germany has had a spate of measles outbreaks totalling more than 1,000 cases. A lack of vaccination has been the main culprit, with many cases occurring amongst unvaccinated immigrants to the country. Such outbreaks could be prevented by increasing the measles vaccination coverage rate and ensuring that vaccination coverage is consistently high among all populations.

#### **Pundits' verdict**

By hosting the GAVI replenishment conference, Germany has a real opportunity to step up and show its support and commitment to the Alliance. The government should seize this moment by pledging \$140 million (€100 million) a year over the next five-year period.

## **GHANA**



#### **GAVI RECIPIENT**

**GDP** per capita: \$1,730

**Domestic DTP3 coverage:** 22%

Child mortality rate: 72 deaths per 1,000 live births

Decline in child mortality since 1990:4 44%

GAVI player since: 2001

Amount received from GAVI: \$186.2 million

Ghana has been a leader in raising the profile of child immunisation programmes. In 2012, it became the first GAVI-eligible country to roll out two new vaccines (rotavirus and pneumococcal) simultaneously. Both of these vaccines need to be kept in temperature-controlled facilities to maintain their effectiveness, requiring the Ghanaian health-care system to rapidly expand its cold chain capacity.<sup>7</sup> In 2013, the government launched a measles/rubella campaign to vaccinate more than 11 million children.8 In all, Ghana receives support from GAVI for eight vaccines, as well as for overall health systems strengthening, CSO support and vaccine-specific operational costs. The country's president, John Dramani Mahama, has been a strong advocate of child health and of GAVI: along with speeches in support of the Alliance, he co-hosted GAVI's Mid-Term Review in 2013 as well as an event in support of GAVI and the Global Fund at the UN General Assembly. 10 Ghanaian immunisation programmes still face challenges. Chief among these is poor access to services in remote, hard-to-reach districts as well as in most urban centres.<sup>11</sup> Other challenges include inadequate numbers of health staff, poor cold chain maintenance and weak surveillance of vaccinepreventable diseases in most regions.<sup>12</sup> While there has been a slight regression in coverage rates over the past year, access to immunisation remains far more equitable in Ghana than in neighbouring countries: only 1% of districts reported a DTP3 coverage rate of less than 50% in 2012, while 19% reported coverage rates of between 50% and 79%, and 80% reported a DTP3 coverage rate of 80% or more. 13

#### **Pundits' verdict**

Although Ghana is a leader on child immunisation, it is not on track to reach MDG 4. The government should continue to increase access to immunisation services around the country while also improving surveillance mechanisms to help control outbreaks of vaccine-preventable diseases.

## **PORTUGAL**



#### **NON-GAVI HIGH-INCOME COUNTRY**

**GDP** per capita: \$20,728

Domestic DTP3 coverage: <sup>2</sup> 98% GAVI commitments to date: none

Portugal has never contributed to GAVI, although it does give official development assistance and health features among the priorities for its aid programmes.<sup>3</sup> Domestically, it has had relatively high levels of success in containing measles outbreaks compared with its neighbours, with only a handful of cases reported in the past few years.<sup>4</sup> Indeed, the main outbreaks have been a number of whooping cough cases among babies too young to be immunised.<sup>5</sup> Much of this success is due to high immunisation rates through free, universal access to vaccines,<sup>6</sup> and Portugal's average vaccination coverage of infants and toddlers for measles, polio and DPT3 is in the top third of high-income countries.<sup>7</sup>

#### **Pundits' verdict**

As a high-income country that gives development aid, Portugal should begin contributing to GAVI for the 2016–20 replenishment period.

## **UNITED STATES**



#### **GAVI DONOR**

**GDP** per capita: \$53,101

**Domestic DTP3 coverage:** 295%

**GAVI commitments to date:** Direct: \$1.2 billion

GAVI player since: 2001

As one of six original donor countries, the United States has been a GAVI supporter since the beginning. Its commitments have increased over the years, with the Administration's Fiscal Year 2015 request of \$200 million representing the highest amount yet. In the 2011–15 period, the US has contributed 7.3% of all funding and more than 10% of all of GAVI's direct funding support. However, its per capita giving remains low: it has provided only about \$0.35 per resident per year between 2011 and 2015, far lower than most other countries' per capita contributions. US support for GAVI aligns neatly with the country's commitment to ending preventable child deaths, a priority demonstrated through the 2012 Child Survival Summit in Washington, DC. President Obama also reinforced this commitment in his 2013 State of the Union address. Despite these commitments, however, the US has had frequent domestic outbreaks of measles, mumps, whooping cough and other vaccine-preventable diseases. These cases number more than 60,000 in all, and many are attributable to anti-vaccination sentiments.

#### **Pundits' verdict**

The trend of steady increases to the US's GAVI contribution should continue throughout the 2016–20 period, translating into a commitment of significantly more than \$1 billion over the next five years.

## **ALGERIA**



#### **NON-GAVI MIDDLE-INCOME COUNTRY**

GDP per capita: \$5,438

**Domestic DTP3 coverage:** 295%

Portion of budget spent on health: 9.75%

Child mortality rate: 20 deaths per 1,000 live births

Decline in child mortality since 1990: 60%

Immunisation is mandatory in Algeria and is available free of charge at all health facilities across the country.<sup>6</sup> Nevertheless, Algeria has had occasional outbreaks of vaccine-preventable disease, including more than 400 cases of measles in 2011. This outbreak was swiftly met with a vaccination campaign that immunised 1,600 people, while blood tests were run to assess possible further transmission and surveillance measures were increased.<sup>7</sup> An outbreak of 87 measles cases was reported in early 2013 and was met with a similar response, with 700 people vaccinated.<sup>8</sup> In 2013, about 2.6 million doses of the polio vaccine were spoiled when the power supply to fridges keeping them cold failed.<sup>9</sup> The government does not currently provide the HPV vaccine to protect against cervical cancer, which is a problem since this form of cancer is a leading cause of death for women in Algeria.<sup>10</sup>

#### **Pundits' verdict**

Algeria's recent outbreaks of vaccine-preventable disease are concerning, and the government needs to do more to increase vaccination rates across the country. In addition, since cervical cancer is a significant concern for Algeria's women, the government should develop plans for the inclusion of the HPV vaccine in its vaccination schedule.

### **BELGIUM**



#### **NON-GAVI HIGH-INCOME COUNTRY**

**GDP per capita:** \$45,384

Domestic DTP3 coverage: 299% GAVI commitments to date: none

Despite being a high-income country that gives official development assistance, Belgium has yet to make any contributions to GAVI. However, in 2011, the country's then Princess Mathilde demonstrated her support for child immunisation by participating in Europe Immunization Week's regional launch in Brussels.<sup>3</sup> Now the country's Queen and also serving as WHO's Special Representative for Immunization, she has repeatedly voiced her support for vaccination in a variety of settings.<sup>4</sup> Brussels will be the venue for GAVI's pre-replenishment kick-off meeting in May 2014, hosted by the European Commission. GlaxoSmithKline provides most of the Alliance's HPV vaccines, which are produced at the company's vaccine headquarters in Wavre, also in Belgium.<sup>5</sup> Domestically, the country has seen close to 200 measles cases in the past few years. Most of these have been among unimmunised people, including a 2011 outbreak in Ghent that infected about 65 people. This began in a day-care centre among babies too young to be immunised, before spreading to schools and infecting children who had not received MMR vaccinations.

#### **Pundits' verdict**

As a high-income country that gives development assistance, Belgium ought to become a first-time GAVI donor during the 2016–20 replenishment period.

## REPUBLIC OF KOREA



#### **GAVI DONOR**

**GDP** per capita: \$24,329

**Domestic DTP3 coverage:** 299%

GAVI commitments to date: Direct: \$6 million (2010–17)

**GAVI** player since: 4 2010

The Republic of Korea's \$3.6 million commitment between 2011 and 2015 represents just 0.05% of all GAVI funding and 0.07% of all direct contributions to the Alliance.<sup>5</sup> It also translates into just a penny per South Korean per year – far lower per capita than other donors.<sup>6</sup> The Korean pharmaceutical industry has supported child immunisation since the 1990s by reducing the price of vaccines such as Hib through technology transfer.<sup>7</sup> Today, this expertise is allowing Korean pharmaceutical companies such as LG Life Sciences and other members of the Developing Country Vaccine Manufacturers Network (DCVMN) to provide GAVI with low-cost vaccines.<sup>8</sup> South Korea has also had success in controlling domestic vaccine-preventable outbreaks. The government declared measles to be eliminated in 2006 and there have been just a handful of cases since then, including 41 in 2011. Of those cases, 97% were due to inadequate immunisation.<sup>9</sup>

#### **Pundits' verdict**

As a former aid recipient that has recently joined the OECD, the Republic of Korea should increase its commitments. It has already pledged \$5 million up to 2017, and the government should follow that with an increased pledge of \$3 million a year through to 2020.

### **RUSSIA**



**GDP** per capita: \$14,819

**Domestic DTP3 coverage: 97%** 

GAVI commitments to date: 4MC: \$80 million (2010–19)

**GAVI player since:**<sup>4</sup> **2007**<sup>5</sup>

Although Russia is a founding contributor to GAVI's AMC, its overall commitments remain low compared with other donors. Its 2011–15 commitment of \$42.9 million makes up just 0.6% of all GAVI funding – an amount that averages out to only about five cents per resident per year. Non-monetary support for GAVI has come through Russian members of the International Federation of Pharmaceutical Manufacturers & Associations (IFPMA), such as InPharma. These companies supply GAVI with low-cost vaccines, allowing the Alliance and its partners to immunise a greater number of children. Meanwhile, Russia has struggled with domestic outbreaks of vaccine-preventable diseases, with more than 4,800 cases in the past few years. The vast majority of these outbreaks have been measles, but seven were also polio – Russia's first cases in more than a decade.

#### **Pundits' verdict**

Russia's per capita and overall contributions have remained low historically, but the country should use this opportunity to show its commitment to child health through a pledge of \$50 million or more for the 2016–20 period.



#### **GAVI DONOR**

GDP per capita: \$100,318

Domestic DTP3 coverage: 25%

GAVI commitments to date: 5 Direct: \$1.15 billion/IFFIm: \$261

million (2006-20)/AMC: \$50 million

**GAVI** player since: 4 2001

As one of GAVI's original six donors, Norway's support has been crucial to the Alliance's success. Not only is it one of just two donors that support all three of GAVI's funding programmes, it is also the second largest government donor overall, trailing only the UK. In the 2011–15 period, Norway's commitments amount to 10% of all GAVI funding. This adds up to about \$25 per Norwegian resident per year – far more per capita than the commitments of any other donor. Dagfinn Høybråten, formerly Vice President of the Norwegian Parliament and the country's Minister of Health, now chairs the GAVI Alliance Board and is a strong advocate for equitable access to vaccines. Norway is also doing well with domestic outbreaks. Unlike most other donors, it has had few vaccine-preventable outbreaks. In total, only 33 children have been infected with measles in recent years.

#### **Pundits' verdict**

Norway's leadership on GAVI and immunisation has been consistent and strong. The country should maintain this leadership role by pledging as much as \$1 billion in direct contributions for the 2016–20 period.

## SWEDEN

#### **GAVI DONOR**

GDP per capita: \$57,909

**Domestic DTP3 coverage:** 28%

GAVI commitments to date: \$378.8 million/IFFIm: \$36.9

million (2007–21)

GAVI player since: 4 2001

As one of GAVI's first donors, Sweden has been a steady supporter over the past decade. Its annual contributions have increased significantly, from about \$2 million in 2001 to \$93 million in 2011.5 Its per capita contributions have also been high: between 2011 and 2015, it gave more than \$5 per resident per year.<sup>6</sup> Anders Nordström, the Ambassador for Global Health in the Ministry for Foreign Affairs, has been a strong advocate for health in the post-2015 development agenda framework and now sits on GAVI's board, representing the donor governments of Denmark, the Netherlands, Norway and Sweden. The country also showed its support for GAVI in late 2013, when Stockholm hosted the Alliance's midterm review to assess its progress towards achieving the goals set during its 2011 replenishment conference in London.8 Domestically, Sweden has room for improvement on child immunisation. Between 1979 and 1996, it suspended whooping cough vaccinations in order to test a new vaccine; during this period, 60% of the country's children contracted the disease, an experience that reinforces the importance of full immunisation. In recent years, there have been a few outbreaks of measles and rubella - a particular setback for Sweden as it had previously been on the verge of eliminating rubella.<sup>10</sup>

#### **Pundits' verdict**

Sweden is a strong contender, and has what it takes to further improve upon its 2011 performance. The country should pledge \$300 million or more in direct contributions for the 2016–20 period.

<sup>\*</sup> These three countries and the European Commission are not playing in the real World Cup, but as they are significant GAVI supporters, we are also assessing each of their contributions in this report.

## EUROPEAN COMMISSION





GDP per capita: n/a

Domestic DTP3 coverage: 2 n/a

GAVI commitments to date: Direct: \$112 million

**GAVI** player since: 4 2003

The European Commission's overall commitments to GAVI are low compared with the pledges made by European Union member states: its 2011–15 pledge makes up just 0.7% of all funding and averages out to just a few cents of investment per European resident per year.<sup>5</sup> That said, the EU member states have collectively provided more than half of GAVI's financial resources. The Alliance's 2014 pre-replenishment kick-off meeting will be held in Brussels, Belgium, which is appropriate given the key role the EU's member states play in its funding and Commissioner for Development Andris Piebalgs' support of GAVI and immunisation. Domestically, EU member states have been struggling with a recent sharp rise in outbreaks of vaccine-preventable disease. Tens of thousands of cases of whooping cough, measles, mumps, rubella and other diseases have been recorded across the EU in recent years.<sup>6</sup>

#### **Pundits' verdict**

Although the development budget has been frozen, the European Commission should dramatically increase its commitments from 2011 to better reflect its stature as a donor. The Commission should commit as much as \$70 million (€50 million) a year to GAVI.

## **CANADA**



#### **GAVI DONOR**

**GDP** per capita: \$51,990

**Domestic DTP3 coverage:** 295%

GAVI commitments to date: 3 Direct: \$236 million/AMC: \$200 million

**GAVI** player since: 4 2002

Much of Canada's support for GAVI stems from the country's strong backing of maternal and child health initiatives, best exemplified by its leadership in 2010 of the Muskoka Initiative on Maternal, Newborn and Child Health (MNCH). All donor commitments to GAVI count toward the Muskoka Initiative, which has catalysed significant new MNCH resources. Canada has already committed an additional \$1.1 billion in new funding for overall maternal and child health between 2010 and 2015, including \$65 million to the AMC and \$20 million in direct funding.<sup>5</sup> The country will be hosting a high-level MNCH Summit in May 2014, which will provide another platform for it to profile its investments in immunisation. Canada is a founding contributor to the AMC, and has committed to providing \$172 million to the initiative between 2011 and 2015 – close to a fifth of the AMC's total funding.<sup>6</sup> Despite Canada's leadership on these issues, its \$256 million GAVI commitment for the 2011-15 period amounts to less than \$1.50 per resident per year, lower than what many other donors have pledged per capita. Increased attention must also be focused on domestic outbreaks of vaccinepreventable diseases as more than 2,000 cases of measles, mumps and whooping cough have been detected across the country in the past few years.8 Many of these can be attributed to low rates of measles vaccination, due in part to a misinformation campaign by anti-vaccination groups.9

#### **Pundits' verdict**

Canada has shown its commitment to GAVI and its mission time and again. The country can reaffirm its global leadership role on MNCH issues by significantly increasing its 2016–20 GAVI pledge to as much as \$500 million.

Just as the FIFA World Cup relies on corporate sponsors to make the tournament a success, GAVI relies on a diverse group of corporate partners and donors to help save children's lives through vaccines. These corporate partners are key team players, providing not just financial resources but also technical expertise, skills and services that allow GAVI to achieve its goals more efficiently and effectively. The Bill & Melinda Gates Foundation is by far the largest private donor to GAVI, having pledged or contributed more than \$2.5 billion since GAVI's inception. But a large and growing list of other partners from the private sector are also making significant contributions. Included here is a full list of these GAVI "corporate sponsors".

Bill & Melinda
Gates Foundation
\$2,549.4m

His Highness Sheikh Mohamed bin Zayed Al Nahyan

\$33m

"la Caixa" Foundation

\$23.8m

Other private donors

\$16.2m

Lions Club
International (LCIF)

\$15m

Comic Relief

\$11.7m

Children's Investment Fund Foundation (CIFF)

\$6.5m

LDS Charities

\$4m

Absolute Return for Kids (ARK)

\$3.3m

Dutch Postcode Lottery

\$3.2m

Anglo American plc

\$3m

JP Morgan

\$2.4m

ELMA Vaccines and Immunization Foundation

\$2.0m

OPEC Fund for International Development (OFID)

\$1.1m

Prudential \$0.2m

GRAND TOTAL = \$2,674.9m

(2000-15)

Statoil \$0.2m

## Conclusion

he countries competing in this year's World Cup have more to offer than impressive goal-scoring power and strong defensive skills. Collectively, as demonstrated by the scouting reports included in this report, they also make a tremendous impact on the health of the world's children through their investments in immunisation. As we approach the 2015 deadline for the current MDGs, these investments have been a driving force behind some of the world's impressive gains on MDG 4 – to reduce child mortality by two-thirds – over the past two decades. In 1990 there were nearly 12.6 million under-five deaths; today we have nearly halved that number

Yet at current rates of progress, UNICEF estimates that the world will not meet MDG 4 until 2028, which could result in an additional 35 million deaths that would not have happened if the goal had been met on time.¹ In order to reverse these trends, the world must now prioritise programmes that will save the greatest number of children's lives with the resources available. Ensuring improved access to vaccines through GAVI and other immunisation programmes is one of the most effective ways to accelerate progress, but achieving this goal will require intensified investment and collaboration from many partners around the world. In order for GAVI to save more than 5 million lives over the next five-year period, every player needs to up their game.

#### **KEYS TO VICTORY**

Most donors must significantly increase their support for GAVI. GAVI has a proven track record of delivering high levels of impact, and in the years since its inception donors have generously supported its work with increasing levels of financing. In fact, countries playing in the World Cup are contributing 62% of GAVI's resources for the 2011–15 period. But this year the bar is set higher: in order to reach its targets, GAVI's financing ask of donors for the 2016–20 period is \$7.5 billion. This will probably be the peak of GAVI's financial requests. Beyond 2020, the Alliance anticipates that its own resource needs will decrease as vaccine prices continue to fall and recipient countries' economies continue to grow, allowing them to take on a greater share of financing for vaccines outside of GAVI support.

Many donor countries – particularly those that are currently contributing lower amounts relative to their GDP or per capita wealth – must significantly increase their multi-year contributions to GAVI to help reach this target. Additionally, it is essential that GAVI broadens its donor base for the next five-year period, recruiting new donors from emerging economies and the private sector onto the team and encouraging donors who have pledged nominal amounts in the past to increase their investments.



## Countries with high levels of disease burden must increase domestic financing for health and must strengthen their immunisation systems.

GAVI's co-financing policy, which has been in place since 2008, is an asset in facilitating increasing ownership by countries themselves of the roll-out of new and under-used vaccines. In fact, co-financing from GAVI recipient countries could generate as much as \$1.2 billion over the 2016-20 period, allowing governments to gradually build the cost of needed for these vaccines into their budgets. In addition, many countries make investments in routine immunisation programmes, alongside their GAVI co-financing. These investments support everything from human resources for health to cold chain and storage equipment to vaccine safety initiatives. These efforts are significant, but they are still insufficient. As of 2012 only six countries across sub-Saharan Africa (Liberia, Madagascar, Malawi, Rwanda, Togo and Zambia) were meeting their own Abuja Summit commitments to spend 15% of their annual budgets on health.<sup>2</sup> A lack of proper investment in health systems often leads to weak health infrastructure that makes delivering vaccines to children in the most remote parts of their countries very challenging. GAVI's success will be increasingly dependent on countries' commitments to strengthening these systems. As such, it is paramount that countries deliver higher levels of domestic financing for immunisation and health, as well as the corresponding political support for these programmes, as complements to GAVI's support.

Emerging economies have developed best practices in immunisation, but they must finish the job on vaccine coverage. Many middle-income countries have emerged as leaders in delivering vaccines to their citizens. In particular, many Latin American countries have worked individually and collectively

to dramatically improve immunisation coverage rates. With support from PAHO, the region has secured lower prices for vaccines, developed innovative marketing approaches through the high-profile annual "Vaccination Week in the Americas" and enjoyed significant levels of political will that have generated robust domestic financing for immunisation programmes. Countries such as Brazil have been early participants in vaccine technology transfer initiatives,<sup>3</sup> and Russian<sup>4</sup> and Chinese<sup>5</sup> pharmaceutical companies produce vaccines used by GAVI.

Yet emerging economies still have a way to go to close the gap. More than 1.1 million people in Latin America<sup>6</sup> – primarily those who live in marginalised or harder-to-reach communities - still have not completed their basic set of immunisations, and in places like Russia and across the Middle East outbreaks remain common. Studies show that to avoid widespread outbreaks of most diseases, countries and regions must ensure a vaccine coverage rate of at least 95%. Many emerging economies remain slightly below that threshold, however, putting them at increased risk.8

GAVI should strengthen its own strategies to ensure that more children are reached, regardless of where they live. GAVI has had tremendous success in improving equity between countries, helping the world's poorest nations to raise their basic vaccine coverage rates from 60-65% in 2000 to 74% in 2012 - much nearer to today's global average of 83%. At the same time, however, it has had less success to date in closing equity gaps within the world's poorest countries. In over 40% of GAVI-supported countries, coverage rates for DTP3 are still 20 percentage points lower in the poorest 20% of the population than in the wealthiest 20%. In the coming years, GAVI should develop a more robust equity policy, building equity criteria into funding windows and supporting countries to track equity data more meaningfully and more accurately. GAVI should also collaborate with a wider range of country-level civil society groups who can help to reach marginalised or under-served populations, to develop innovative approaches to the delivery of services and to hold countries accountable for achieving impact.

GAVI must also closely examine its eligibility criteria for the 2016-20 period and beyond. Currently, it supports only low-income countries with an annual Gross National Income (GNI) per capita of no more than \$1,570. Yet based on this criterion, it is estimated that by 2020 more than half of the world's unimmunised children will be living in countries that have graduated from GAVI eligibility. Maintaining a black-and-white eligibility threshold based on just one financial indicator will make GAVI a less relevant player, both in the immunisation space and also in global debates on how best to end preventable child deaths. GAVI's board and stakeholders, in close collaboration with other partners, should revise these policies, considering ways in which non-financial indicators - including disease burden, strength of health systems and size of birth cohort - can be factored into the Alliance's decision-making. At the same time, GAVI should be careful not to stretch itself too thin. It should work with other financing vehicles, organisations and technical bodies to determine who else might be better suited to provide complementary types of support for immunisation financing, health systems strengthening and data collection in newly graduated countries.

All countries must work harder to ensure high rates of vaccination coverage to prevent outbreaks. Vaccine-preventable diseases do not respect borders or economies, and in recent years many countries in both the North and the South have seen diseases re-emerge, often causing significant disability and death and reversing years of progress. In recent years tens of thousands of people in almost every country in Western Europe and North America have been infected with measles and whooping cough, despite these diseases having been eliminated years ago. Due to cross-border transmission, polio outbreaks are still occurring across Africa and Asia in regions and countries where the disease had once been defeated. For most countries, preventing such outbreaks will require continuous efforts to extend routine and new vaccination coverage, particularly among migrant and marginalised populations. But importantly, countries must look more broadly to improving security for health-care workers, strengthening health systems and fighting stigma and misconceptions related to vaccine safety. In an increasingly interconnected world, where many diseases are just a bus, train or plane ride away, countries must ensure that their citizens are receiving the vaccines needed to keep them healthy, wherever they may travel. Perhaps nowhere is this phenomenon more likely to be visible than at the World Cup tournament itself, which will bring fans from all over the world together in stadiums and bars. mingling and cheering side by side.

As we near the World Cup kick-off, countries from around the world will be bringing together their biggest talents, pushing them to play cohesively as a team and to deliver the biggest games of their lives for their countries. In the same way, GAVI, its donors and its partners must step up into the spotlight together, committing bold new resources and reaffirming the political will appropriate to such an important moment for immunisation. Working together over the next five years, they can save more than 5 million children's lives and ensure a healthy start for hundreds of millions more. Like the fans who tune in for the tournament, we will be watching and cheering on those who help to score this life-saving goal.

# Methodology



### How were the countries chosen for profiling?

We began by creating profiles for all the countries competing in the 2014 World Cup and analysed them in their initial World Cup groupings ("Group A", "Group B", etc.). We made two exceptions:

- We developed a profile for the United Kingdom instead of England because the UK government – and not England – contributes to GAVI.
- We developed profiles for four additional donors Canada, Norway, Sweden and the European Commission ("Group X" collectively) – because although they are not playing in the World Cup, they are all significant contributors to GAVI and to immunisation



### What are the main sources of data?

ONE used a variety of publicly available information to collect data for the country profiles. The main sources included:

- The GAVI Alliance's website, including its country profiles and resources sub-pages for information on GAVI donors and recipients;
- UNICEF's 2013 "Committing to Child Survival: A Promise Renewed. Progress Report 2013" for the decline in child mortality between 1990 and 2012, and for 2012 child mortality rates;
- UNICEF's 2014 "State of the World's Children in Numbers" report for national DTP3 coverage rates in 2012;
- WHO's national health indicators for data on portions of country budgets allocated to health spending in 2012;
- The IMF's World Economic Outlook database, updated in April 2014, for data on gross domestic product (GDP) per capita in 2013 using current prices;

- The Council on Foreign Relations (CFR) for data on vaccine-preventable disease outbreaks between 2008 and 2014;
- The Pan American Health Organization (PAHO)'s database for data on outbreaks of vaccine-preventable disease and immunisation coverage in PAHO member states; and
- The WHO/UNICEF Joint Reporting Programme for data on geographic equity in immunisation within countries.



## What main indicators and factors were assessed in each country's narrative?

We included a variety of indicators, with the key ones being:

- Financing indicators, including historic contributions to GAVI, GAVI spending per capita, GAVI spending as a percentage of total GAVI contributions, and trends in giving.
  - All amounts are listed in US dollars at the exchange rate on the day the commitment was pledged or received, unless otherwise specified.
  - Under the "commitments to date" indicator, figures include all resources that governments paid to GAVI from 2000 to 2013 and have promised to GAVI for the 2014–15 period. Where there are exceptions (primarily where governments have made pledges beyond the 2000–15 timeframe), we have noted this in the country's profile. This is frequently the case for AMC and IFFIm pledges. Both innovative financing streams were designed to secure long-term, multi-year commitments that extend far into the future, and we have reflected the full amount of countries' commitments to these programmes in their profiles, acknowledging the unique end dates for each. Full year-on-year breakdowns of AMC and GAVI commitments can be found on GAVI's website, under its donor profiles section.

- All pledges and contributions from donors specified for the 2011–15 period are proceeds to GAVI, unless otherwise specified;
- DTP3 (the third dose of the diphtheria-tetanus-pertussis vaccines) immunisation coverage for all countries as a measure of the strength of national immunisation programmes, as DTP3 vaccination is standard across most countries and requires three instances of contact with the same patient;
- Leaders who have demonstrated a noteworthy commitment to GAVI and/or to immunisation within the country, and any domestic institutions that have played a role in improving access to vaccines for all countries;
- Equity in coverage, improvements in immunisation and national immunisation goals for recipient and non-GAVI middle-income countries as indicators of national commitments towards universal vaccination in-country; and
- Domestic outbreaks for all countries as a measure of the effectiveness of national immunisation and surveillance mechanisms against vaccinepreventable diseases.



## What information was not included in each country's narrative, and why?

ONE recognises that the indicators chosen do not fully convey all the nuances of each country's contributions to domestic and global immunisation efforts. In particular, among other indicators we would have liked to have included, but have not done so because of a lack of comparable data or space within this report, were:

- Domestic spending levels on health generally and immunisation specifically;
- Coverage rates for vaccines other than DTP3;
- Data on vaccination rates by socioeconomic group within countries.



#### How were verdicts decided?

The "pundits' verdicts" are based on an overall analysis of each country's performance and are specific to the role that the country plays in global child immunisation and health. As such, projections for current and prospective GAVI donors take into account the status of official development assistance budgets and past giving. Projections for GAVI recipients and non-GAVI middle-income countries are based on overall domestic immunisation rates and considerations of equity, as well as on national leadership on domestic immunisation. These projections are made by ONE, and are not formally endorsed by GAVI, PAHO or other technical bodies

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