GAVI Alliance Progress Report 2006
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Message from the Chairs of the GAVI Alliance and the GAVI Fund Boards

Although each year of its existence has seen change and growth, 2006 has been an especially dramatic one for GAVI, and for the countries and children this Alliance serves.

The power of public–private partnership has never been so strongly demonstrated as this year with the launch of the International Finance Facility for Immunisation (IFFIm). This breakthrough in development financing has radically altered the scale and time frame of GAVI's operations.

IFFIm brings more resources for 2007 than GAVI has disbursed in its first five years. The timescale for execution is at once both more immediate through “frontloaded” funds, and longer-term, through the IFFIm structure that extends resources until 2025. This is a privilege and a challenge to performance.

This report on the past year's progress shows us a partnership working at both the global and local level. The voices of those partners resonate through all levels and sectors of society - national, multinational, private, public, civil society and local - their concerns and triumphs evidenced in the stories and details in this report. They tell us of solid progress, and effective planning. They tell us that there is still a very great deal to do.

Our shared goals shape the work we see reported here: to reach the most vulnerable in the poorest countries, to change the lives of children worldwide, both now and into their future, bringing the best of new and existing technologies to those who need their benefits most.

Through the new health system strengthening investment, we are improving the effective delivery of services and building human, institutional and knowledge capacities. If we are to sustain immunisation performance over time, it is critical that we sustain health systems' quality, equity and efficiency. Unless GAVI, and others, continue to make such an investment, rapid progress towards targets is greatly hampered.

With the Boards' decision in 2006 to support two more new vaccines - against rotavirus and pneumococcal disease - GAVI has taken another important step towards quickly addressing two major causes of childhood death - diarrhoea and pneumonia.

Together rotavirus and pneumococcal disease are responsible for 1.5 million child deaths each year - or about 15% of all deaths among children under the age of five years. The Boards' decision makes funding for these vaccines available for GAVI countries sooner than ever before. It shaves 5-10 years off the historical precedents for putting new vaccines into use in developing countries.

This year has brought more donors and increased emphasis on multi-year funding. Beyond that, there has been an extraordinary commitment from our fellow Board members who have provided their crucial input to the many review committees, task forces and working groups that make up GAVI's unique peer review system. Not everyone on the Boards agrees with each other all the time. But this is healthy. It provides a creative tension that is at the heart of this public-private mix. We expect a great deal of GAVI - and that means that we expect a great deal of ourselves.
Change continues: the management and staffing review conducted in 2006 identified areas both for growth and for streamlining in the Secretariat. Three new core functions were created and staffed; the chief operating officer, the chief financial officer, and the chief policy and technical officer.

With a new 2007-2010 strategy and better integrated financial management we are seeing a stronger and more effective staff and management structure emerge. The first set of combined financial results was produced in 2006 and we will have fully audited consolidated financial statements in 2007.

This Global Health Partnership continues to be a vigorous and dynamic force in the development field. GAVI has a special mix of skills and energies. The momentum this gives has allowed us together to prevent more than 2.3 million needless deaths from vaccine-preventable diseases.

Our shared goals demand that we do even more to save children’s lives and protect people’s health. GAVI is uniquely placed to respond to this challenge in the coming years.

Margaret Chan  
Chair of the GAVI Alliance Board

Graça Machel  
Chair of the GAVI Fund Board

[Signatures]
This report for 2006 is the first of the new 10-year phase of operations which will take us to 2015 and beyond. It is a report that reflects joint achievement and future plans. Above all, this is a report which celebrates successful partnership. The voices are those of individuals, but the goals and challenges are shared - and they point us towards a unique space - where the energy, skills and experience of both public and private sectors positively interface.

We go forward with a renewed and strengthened mandate, expanded in its scope to encompass the vital aspect of strengthened health services. However powerfully immunisation protects against specific diseases, an integrated platform for delivery is required. Children and communities also need the broader preventive strength of health services that work.

These changes have profound implications. For example, allowing countries to be more ambitious in scaling up. Or in extending the horizons of vaccine demand forecasting. They also challenge GAVI to demonstrate and account for the difference we make.

Sustainability, predictability and the evaluation of impact are core ingredients in GAVI's future plans. These virtues have been given new life through private sector know-how and innovation. This is at the heart of the IFFIm, and of the new market shaping mechanism - the Advance Market Commitment, a pilot of which the Boards approved in 2006 for pneumococcal vaccine - of our broader vaccine strategy planning.

Another repeated message - fully acted on - is the need to harmonise and integrate our finance and programmes at country level with national strategies and processes. The “Paris Principles” are not a theoretical construct in GAVI supported countries. They are put into everyday practice, routinely measured, and form part of our evaluation processes.

All of this supports our main purpose: to save lives, building on a solid platform of results. WHO projections show a sharp rise in coverage with Haemophilus influenzae type b (Hib) vaccine in 2006, and indicate that an additional 20 million children had been immunised against Hib through GAVI-supported programmes by the end of that year.

Similarly, an additional 126 million children had been immunised against hepatitis B and an additional 17 million children had been immunised against yellow fever. The number of countries applying to take up these core GAVI vaccines continues to grow, with 16 more new Hib vaccine applications and 5 more hepatitis B vaccine applications in the pipeline for 2007.

The GAVI Alliance remains committed to accelerating the use and uptake of new and underused vaccines. We added rotavirus and pneumococcal vaccines to the portfolio for
developing countries. We also partnered with the Measles Initiative in 2006, contributing to campaigns in 18 African countries, and substantially supporting a remarkable decrease of 75% in measles mortality in the African Region.

Each year, despite increases in the birth cohort, there are fewer unvaccinated children in GAVI-supported countries. DTP coverage rates, which illustrate the performance of the health system in making regular contact with mothers and children, show a picture of steady improvements, and in Africa's case, remarkable improvement: from coverage of around 40% in 1999, to a projected coverage of over 70% throughout the continent in 2006. This compares very well to a projected coverage figure of 77% for GAVI countries worldwide.

This report shows those successes, but it also shows the urgent need to scale up our work in this area, listening carefully to countries and to the other partners in the Alliance.

We have learnt a major lesson from our first five years of operation: we underestimated the length of time it would take for vaccine prices to fall. Yet even here we are beginning to see results.

This report shows that DTP-HepB prices have dropped 40% since 2001, with promising indications for pentavalent vaccine (DTP-HepB-Hib) prices to decline as more manufacturers enter the market. Understanding this dynamic has had important implications for planning sustainable new vaccine programmes with countries: it has contributed to the discussion and development of a new, longer-term co-financing policy which takes effect from 2007.

The GAVI Alliance is an evolving force, with a clearly emerging identity and position in the development world. We are still learning how best to articulate and shape the power of partnership and its added value, although we are making rapid strides towards more coherent operating and governance structures.

I would like to thank all our partners, our Board members, and especially our superb Board Chairs, for all that they bring to this Alliance - energy, commitment, experience, and creativity.

I am really proud to be running an increasingly diverse Secretariat team, drawn from the best of public and private including well beyond the traditional territory of the health or development community. Their talent tests and stretches the conventional boundaries of responsibility and initiative and acts as an independent marker of the regard in which GAVI is held.

Combined with the remarkable dedication and drive of all within the Alliance, and within the countries we serve, I feel great optimism about what we can achieve in the coming years, and gratitude to all those who are together already making a difference.

Julian Lob-Levyt
Executive Secretary of the GAVI Alliance
and CEO of the GAVI Fund
innovative partnership
Achieving results through partnership

The GAVI Alliance is its partners. The GAVI Alliance is a unique global network representing both private and public interests to achieve a goal no single agency or group could reach on its own. The Alliance makes possible accelerated access to existing or underused vaccines, strengthened health and immunisation systems in countries, and innovative new technologies and vaccines. This, in turn, saves millions of lives worldwide.

Complementing the partnership’s skills and technical resources, the GAVI Fund acts as the financing arm for the GAVI Alliance – attracting resources from a range of donors and (along with the International Finance Facility for Immunisation (IFFIm)) acting as the home for GAVI’s innovative financing activities. In addition to fund-raising, the GAVI Fund brings business and financial management insight into GAVI’s activities with the aim of managing resources effectively and channelling funding where it is needed most.

Synergy and innovation
The Alliance brings together partners from developing world and donor governments, private sector philanthropists and the financial community, vaccine manufacturers and public health institutions, civil society, nongovernmental organisations (NGOs), and United Nations agencies. The expertise and reach of each partner is enhanced through their alliance. Together that partnership is able to overcome problems and develop innovative solutions no one partner could achieve alone.

The science of vaccines has been available to the world for many years. The GAVI Alliance has created the secure resources, the collective commitment and the momentum necessary to use this tool more effectively for every child.

Putting GAVI’s public-private mix into practice is shaping a unique space for this partnership’s work. It operates in the business continuum between the United Nations and the corporate world. The current dual-Board governance structure reflects this with the varied membership of GAVI’s governing bodies bringing a broad skill base to policy-making and governance. Similarly, Secretariat recruitment ensures diversity of experience and input.
Country focus
The GAVI Alliance is built upon the foundation of active partnership with and by national governments. The GAVI Fund provides stable and predictable funding to countries to improve their immunisation programmes based on their applications. In a distinct departure from traditional funding systems that impose external guidelines on use of resources, GAVI relies on performance requirements, allowing governments to set goals and monitor progress. The result is a ‘bottom-up’ approach for applications, based on country plans and needs.

Progress in 2006

Harmonised effectiveness
Through harmonisation of efforts with other global health partnerships and health agencies, and in accordance with the OECD Paris Declaration on Aid Effectiveness, GAVI strives to minimise costs to governments, cut red tape and increase efficiencies of health and vaccine delivery.

Extending the partnership base
From an initial partnership of five in 2000, the GAVI Alliance had grown to a strength of 27 partners by the end of 2006. Renewed commitments, longer-term engagement and increased resources for scaling up are hallmarks of the new growth. Equally important have been the fresh perspectives and new ways of working brought to the Alliance.

Deepening engagement
The quality and depth of partnership activity has improved during the last year. More than half of GAVI’s donor partners have moved to multi-year funding, others are engaging through IFFIm. Many of the partners are active within the GAVI structure, serving on boards, task forces and work groups. GAVI’s Health System Strengthening (HSS) task team is linked with a range of global health partnerships and agencies. These include: the Global Fund for AIDS, TB and Malaria; UNAIDS; The Stop TB Partnership and Partnership for Maternal, Newborn and Child Health; the Global Health Workforce Alliance; the Health Metrics Network; and the Health Systems Action Network.

Strengthening and broadening relationships
Institutions like Johns Hopkins Bloomberg School of Public Health have been invaluable partners in shaping and progressing research into breakthrough areas. At the same time, new relationships with the financial sector have resulted in innovative and creative new funding mechanisms such as IFFIm and Advance Market Commitments, or AMCs.

The vaccine producers involved with GAVI have worked steadily and actively to contribute to the supply of high quality vaccines to the poorest populations, and to the development and supply of new vaccines.

Important progress was made in 2006 as GAVI developed guidelines and began accepting applications from national governments for funding of health system strengthening proposals. This marks the logical, broader extension to the role in health service strengthening offered by immunisation services support (ISS). More importantly, the country processes for the development of the health system strengthening proposals have themselves supported the bringing together of stakeholders.

“When we put our best hearts and minds to something as a world - when you bring non-profit, business, governments and great leadership together - you can do great things.”

An initial 15 countries submitted proposals for US$ 275 million in support in 2006. Of these, five (US$ 92 million) were approved. Further approvals are expected throughout 2007.

The US$ 500 million HSS funding window has the potential to strengthen local and regional technical assistance networks, and increase investment in human resources and health infrastructure, as well as stimulate the design of strong monitoring and evaluation mechanisms in the coming years. As with all GAVI funding, proposals for health system strengthening are country-led and funds are fast-tracked to address the most urgent problems.

The Civil Society Initiative was formulated with substantial input from the sector. All GAVI-funded countries can apply for assistance to strengthen the representation and coordination of civil society at all levels in immunisation with funding of US$ 7 million for 2007 and 2008. The Board also agreed to financially support civil society organisations in 10 pilot countries with US$ 22 million in 2007 and 2008 to assist in the implementation of health system strengthening proposals or immunisation plans.

This initiative will contribute to a more active voice for civil society organisations within the GAVI Alliance and at national, regional and global levels. It will greatly improve efforts to vaccinate children in many of the hardest to reach areas and in fragile states. The active participation of civil society will be crucial to achieving GAVI’s strategic goals and the Millennium Development Goals (MDGs).

Improving effectiveness and harmonisation
Following endorsement of the OECD’s Paris Declaration on Aid Effectiveness in 2006 by the GAVI Alliance Board, GAVI has been working with a range of health-related organisations to better coordinate aid efforts. The Declaration calls for countries and organisations to increase efforts to align and harmonise in order to improve aid effectiveness.

Processes that support partnership and good planning
2006 was a transition year for the GAVI Alliance. In practical terms it marked the end of the Phase 1 strategic plan for 2000 to 2005, and the launch of Phase 2, which runs from 2006 to 2015.

From a governance perspective, 2006 saw successful management convergence of the Alliance, the Fund and the Secretariat. The consolidation of finances under the management of the GAVI Fund, and an agreed mutual accountability were further positive changes in Board relationships post-convergence.

“If we want improved health to work as a poverty-reduction strategy, we must deliver interventions to the poor.”

Dr Margaret Chan, Director-General, World Health Organization, 2007
GAVI governance structures and processes will be further reviewed in 2007 to ensure the best fit with GAVI’s objectives and mission.

Strategically, 2006 saw an extension of the operating model evolved in Phase 1, which had enabled countries to plan for immunisation, recognised the financial implications of introducing new vaccines, and rapidly integrated the new antigens into the national immunisation programmes.

The principles of GAVI Phase 2 directly reinforce harmonised national planning processes. The comprehensive multi-year plan for immunisation (cMYP) is a requirement for country applications for GAVI financial support.

Using the Global Immunization Vision and Strategy (GIVS) framework, the cMYP process streamlines immunisation planning processes at national level into a single comprehensive plan, including the critical elements of costing and financing. It draws on the methods developed for the immunisation Financial Sustainability Plans (FSPs). FSPs were a principal requirement for GAVI Phase 1, but limited to GAVI-eligible countries. cMYPs, however, are now recommended to all 192 WHO Member States.

The cMYP process has been useful to countries, supporting a comprehensive strategic programme planning and costing approach for immunisation within a coordinated framework. It builds on existing national planning processes, reduces the duplication of efforts for countries, and increases national ownership.

In the past year, over 50 countries have developed cMYPs using the WHO-UNICEF cMYP guidelines and costing tool.

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**The country view**

**Frank Nyonator, Director of Policy, Planning, Monitoring and Evaluation Division, Ghana Health Service**

“I am the director of planning not only for the Expanded Programme on Immunization (EPI), but for all programmes. When we sit together to negotiate and allocate funds for the different health programmes, the FSP has ensured that EPI always has good, well-articulated and thought through proposals to bring to the table, on how much is needed for immunisation on a yearly basis. And you can’t argue with that! Now we are working on the cMYP, which takes us a step further and helps us to situate EPI more firmly in the context of the overall health sector strategic plans and programmes of work.”

**Clifford W. Kamara, Director of Planning and Information, Sierra Leone**

“Sierra Leone is emerging from a devastating conflict where most of our health infrastructure collapsed, but immunisation services had actually been sustained throughout the conflict. Now, we are in a situation where we are rebuilding our infrastructure.

In terms of planning, we have gone from emergency planning mode where we at one stage had weekly plans, to one month, then gradually increased time frames up to three-year plans, and we are now moving to the strategic planning level. As the overall director of planning, I have to coordinate all plans. The cMYP has been very helpful in that it assists us to see the immunisation programme in context. It forces us to get the different programme people together with each other and with the budget people. The different programmes are at very different stages of development, and so this process is a good learning process for all of us.”
GAVI’s way of working directly reflects the global health partnership principles, of ownership, alignment, harmonisation, managing for results and accountability, applying the process for monitoring required by OECD-DAC. The GAVI Secretariat works closely with the Global Fund for AIDS, TB and Malaria to evaluate how better to align its support to country needs.

### Measuring implementation of the Paris Declaration on Aid Effectiveness

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<thead>
<tr>
<th>Indicator</th>
<th>Target level (%)</th>
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<tr>
<td>Aid flows aligned on national priorities</td>
<td>100 100</td>
</tr>
<tr>
<td>Use of country public financial management systems</td>
<td>75 90</td>
</tr>
<tr>
<td>Use of national procurement mechanisms</td>
<td>2 No target</td>
</tr>
<tr>
<td>Avoidance of parallel implementation structures</td>
<td>100 100</td>
</tr>
<tr>
<td>Aid predictability</td>
<td>100 100</td>
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<tr>
<td>Use of common arrangements or procedures</td>
<td>100 100</td>
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### Aligning GAVI aid flows with national priorities

The majority of new vaccines supported by GAVI are procured through UNICEF, to take advantage of its sourcing and ability to negotiate best market prices through bulk procurement. As the vaccines are supplied “in kind” their cost is not reflected in national health budgets.

GAVI has institutionalised a new coordinating mechanism at country level: the Inter-Agency Coordinating Committee (ICC). This involves both the ministry of health and other partners in the management and use of funds provided by GAVI to a country. GAVI support is planned for, implemented and monitored by the ICC in line with government plans and priorities. Where appropriate the ICC can be incorporated in sectoral coordination forums.

### Increasing use of country public financial management systems

Both cash and vaccines are provided to support national immunisation programmes (during 2005 cash support represented only 25% of the total GAVI disbursement). Their management is audited by national mechanisms. GAVI aims increasingly to align its support with government financial processes.

From 2007 onwards, in line with GAVI's principle of aligning itself with national budget and planning cycles, a change towards reflecting GAVI funds in finance ministries' budget is expected. This will result in an increase in the use of country public financial management systems. By 2010, 90% of support will be accounted for within country public financial management systems.
Using national procurement mechanisms
GAVI has not set a target for this indicator, as the majority of new vaccines supported by GAVI are procured through UNICEF. Partner countries have the option to use national procurement mechanisms but so far, only 2% of funds spent by GAVI on new vaccines have gone through national procurement mechanisms.

Avoiding parallel implementation structures
Funds are provided through existing programmes and no parallel structures are supported by GAVI.

Making aid predictable
GAVI informs countries about approved multi-year support. Funds are provided according to an agreed disbursement schedule and are aligned with national budgetary processes.

Using common arrangements or procedures
All GAVI support is coordinated through the Inter-Agency Coordinating Committee. Health system strengthening support will be jointly coordinated by health ministries and their partners. GAVI expects to maintain its target of 100% for this indicator.
Four times a month, 18 year-old Ajebush Wakalto starts her day with a two-hour walk from the village of Timbicho in southern Ethiopia to pick up her supply of vaccines, and walks two hours back to the village health post where she administers them to the community’s infants. Three days a month she carries the vaccines a further 30 minutes to one of the outreach sites where women have gathered with their children in the shade of a big tree to await immunisation. “Having to walk this distance is the main challenge that I face in my work”, says Ajebush with a smile.

Before the establishment of the local health post, the nearest health centre for the more than 5,000 residents of Timbicho was about two hours away. But for nearly three years Ajebush has been their local health extension worker, having completed 12 months of training in Ethiopia’s Health Extension Programme (HEP).

When fully implemented, the HEP will have trained and placed 30,000 health extension workers like Ajebush for the country’s nearly 80 million inhabitants. It is the centrepiece of the health component of Ethiopia’s national poverty reduction strategy.

For the village of Timbicho, it has meant a dramatic improvement in health-care. But it takes partnership and shared responsibility from top to bottom to ensure that the programme is successful.

For instance, Ajebush is supported by local health volunteers who go house to house to register pregnancies and births, and to promote health services such as immunisation. They are trained and supported by NGOs. “Religious leaders help me too,” says Ajebush. “It is a religious community, so the support from the religious leaders is very important in mobilising the community members to seek my services.”

The community is responsible for ensuring that the health extension worker has a health post from which to work. Ajebush and her fellow health extension workers are supported and supervised by staff of local health centres and district health offices.

The district health offices are, in turn, supported at the regional level by the Regional Health Bureaus, which receive technical support from the Ministry of Health, and in some cases advisers from WHO and UNICEF. At the national
level, the Ministry of Health works with these and other international partners on aspects of planning and technical issues.

GAVI is among the partners working to support Ethiopia’s health improvement programmes. In 2006, Ethiopia applied for and was approved for one of GAVI’s HSS grants, valued at a total of US$ 76.5 million over four years. This grant, one of the first of its kind to be awarded, will support Ethiopia’s HEP. In the same year, Ethiopia also received funding from GAVI for the introduction of the 5-in-1 pentavalent vaccine.

His Excellency Tedros Adhanom Ghebreyesus is the Minister of Health for Ethiopia and a member of the GAVI Alliance Board. He says that the Government of Ethiopia aims to provide access to basic health services to all Ethiopians, but that the country’s health infrastructure needs strengthening to achieve that. “Our vehicle has not been strong enough to carry all the programmes we have loaded on it,” he says, ‘Now we are working to strengthen the vehicle so that it can carry our programmes, the vaccines and the other health-care interventions, to every corner of this vast country.”

In Timbicho, Ajebush, whose salary is regularly paid by the Government, is working to do her part to ensure all the children are immunised. “We manage to cover quite a large part of the eligible population this way,” she says proudly. “The immunisation rate is over 80% now, and I aim to get it up to 100%. I always wanted to be a health worker to help my family and community. Now that I have been here for more than two years I can see my work is useful and helps people and families to become healthier, and that is very encouraging for me”.

FACT FILE

Total population: 79 million
Surviving infants: 2,942,000
Infant Mortality Rate: 87 per 1,000 live births
Under-five mortality: 145 per 1,000 live births
Per capita Gross National Income: US$ 160
Expenditure on health: US$ 12
Health worker density: 0.6 per 1,000 population
DTP3 coverage: 69%
Percentage of districts with more than 80% DTP3 coverage: 24%
The year saw broadening of support for child health policies at many levels and across many sectors, raising the profile of immunisation on global and political agendas. Events throughout 2006 reflected growing political commitment for health-related development issues and specifically child immunisation. For example, the G8 Summit in St Petersburg, the Russian Federation in July 2006, focused global attention on infectious diseases. GAVI joined other international health organisations in urging the global leaders to continue their commitments to improving the health and lives of people in the world’s poorest countries.

Providing strong leadership, President Chirac and Graça Machel spoke at the February 2006 conference on innovative financing in Paris. Technical and scientific international health networks participated in the GAVI-sponsored Copenhagen Panel on Key Challenges for Global Health Partnerships in March 2006. The faith community and the entertainment world supported the IFFIm launch in London in November 2006, and civil society joined plenary meetings in Paris and humanitarian congresses in Berlin during the year.

**GIVS**

WHO and UNICEF adopted a Global Immunization Vision and Strategy (GIVS) in early 2005. The 2006-2015 strategy sets out the challenges for global stakeholders in immunisation over the next decade, including financing new and underused vaccines, and ensuring equitable supply and access for all people.

GIVS aims include reducing the numbers of unimmunised children by 62% by 2010, which will contribute to the overall aim of a two thirds reduction in vaccine-preventable mortality and morbidity by 2015.

Considerable progress has been made. For example, the World Health Assembly hepatitis B vaccine introduction goal has almost been achieved, with 162 countries out of 193 WHO Member States already having introduced this vaccine (in four countries introduction is partial). Similarly, by 2006, the Haemophilus influenzae type b (Hib) vaccine had been introduced into 106 countries. GAVI is strongly supporting these goals, having provided hepatitis B vaccine to 61 countries and Hib vaccine to 21. These numbers are due to further increase in 2007, with 16 more new Hib vaccine applications and 5 more hepatitis B vaccine applications in the pipeline.

To dramatically reach large numbers of unvaccinated children, the eight countries that account for two-thirds of all unimmunised children (the Democratic Republic of the Congo, Ethiopia, India, Indonesia, Nigeria, Pakistan, the Philippines and the Sudan) have been identified and plans are being drawn up to boost immunisation in these countries.

**Building momentum for child health**

It is projected that by 2015, GIVS will have prevented a total of 40 million premature deaths.
The way forward

Strengthening engagement
GAVI is committed to the continued strengthening of the partnership, increased cooperation and harmonisation of efforts. Additionally, GAVI hopes to further broaden the donor base, particularly among middle-income countries and private donors.

GAVI's Strategic Plan 2007–2010
In 2006 the GAVI Alliance Board approved the strategy for 2007–2010. Broadly, this positions the Alliance within the context of child survival, the MDGs and GIVS. It seeks to provide a critical contribution to the global goals in GIVS by supporting immunisation programmes and health systems, as well as accelerating introduction of new vaccines.

The mission statement of the GAVI Alliance was amended in 2006 to reflect the additional element of health system strengthening that now forms part of the mandate.

Financially supporting Alliance members through the 2006–07 workplan
Funding is included in the GAVI workplan to support WHO activities such as those related to conducting disease surveillance, strengthening countries’ immunisation waste management policies, improving vaccine management performance and broadening the mandate of the inter-agency coordinating committees. Similarly, UNICEF activities related to financial sustainability and strengthening procurement capacities at national and regional level are supported.

New paths forward
The health system strengthening and civil society initiatives will continue to be implemented, with funding distribution extending their impact. In cooperation with other health-related agencies, GAVI will work to improve health systems with the goal of increasing access, delivery and availability of vaccines to those who need them most.

Supporting fragile and small states
The GAVI Board has approved special support to immunisation programmes in fragile states. There is also a need to address the challenges faced by small countries as well as the populous countries identified by GIVS, where the fixed costs of application and implementation perhaps make immunisation prohibitive. GAVI will examine these exceptional situations and develop ways to address tailored solutions.

Focusing on the children
Even with these new measures, there are significant numbers of children who still are not immunised, particularly in large countries, as the GIVS strategy identifies. Reaching them will remain the biggest challenge facing the GAVI Alliance partners in the years ahead. All the expertise, knowledge and advocacy skills of each and every partner, working together, will be needed.

GAVI mission statement: saving people’s lives and protecting people’s health by increasing access to immunisation in poor countries.

Four strategic goals
- Contribute to strengthening the capacity of the health system to deliver immunisation and other health services in a sustainable manner.
- Accelerate the uptake and use of underused and new vaccines and associated technologies and improve vaccine supply security.
- Increase the predictability and sustainability of long-term financing for national immunisation programmes.
- Increase and assess the added value of GAVI as a public-private global health partnership through efficiency, advocacy and innovation.
It is a long road that takes you to the village of Lago in Nigeria’s northeast Bauchi State, but it is a road of hope. Hope for change, hope for immunisation, hope for improved health and a better future for this region’s children.

Alhaji Muhammed Maigari Lago assumed the position as head of this village of 20,000, mainly subsistence farmers, three years ago. His first major test as leader was the rejection of polio vaccination by the people. Rumours, fear and misunderstanding had turned many against immunising children. Particularly in Nigeria’s north–east regions, strong cultural and religious resistance was growing, fuelled by stories that questioned the vaccines’ safety. Nigeria’s immunisation coverage, which had been over 80% in the 1980s, had dropped to 13% by 2003. With an upsurge in polio transmission, Nigeria was reporting the highest numbers of polio cases in the world. The consequences were global. Starting in 2003, virus originating in northern Nigeria re-infected 20 previously polio-free countries, as far away as Indonesia.

In Lago and across the region, there was also an alarming rise in children contracting measles, with devastating effects. Alhaji Muhammed Maigari Lago says that in 2005, five children died of measles in one household alone in the village.

The Nigerian Government began work to restore immunisation coverage by reinvigorating the country’s health infrastructure. As part of this, Nigeria received funding for immunisation services support from GAVI. The process of developing the GAVI proposals focused partners and resources on planning. Partners at different levels of the public infrastructure and beyond drew together and developed a multi-year strategic plan for routine immunisation. As a result, Immunisation Plus Days and measles campaigns were planned and implemented by the state ministries of health with support from UNICEF, WHO and other partners.

However, rebuilding trust in vaccines among leaders and community members was another challenge. Recognising the complexity of overcoming strongly held beliefs, the Ministry of Health worked with partners at all levels to develop a multi-pronged social mobilisation and advocacy strategy which aims to promote ownership and community participation in immunisation services.

In Lago and other villages across Bauchi State, it was a daunting task but one that Alhaji Muhammed Maigari Lago took up readily. “I gather people in their settlements and go talk to them and in places of non–compliance, I pool them together to find out reasons for non–compliance. In the ensuing
dialogue, I state my case and encourage them to accept,” he says. “I send for the religious leaders of all the settlements and in my palace we have dialogue. Then they take the message to all the people through sermons during worship.”

Traditional and religious leaders are key to the success of the mass mobilisation, and they have taken up the cause. Religious leaders use their authority, taking the opportunity during prayers to encourage immunisation and inform community members of dates and locations for immunisation activities. Other influential figures at local, district, state and federal levels play a crucial role in getting the message out, changing attitudes and beliefs, and getting parents to bring their children for immunisation.

Hajia Habiba Sabo Gabarin is the parliamentarian representing Darazo in the Bauchi State House of Assembly who took an active and personal role in changing attitudes. “I go from house to house, telling them the importance of it, giving them pictures of polio victims,” she says. “The only way is by telling them the reality. So gradually they began to accept. It is no longer as bad as 2003, it is much better now. We convinced them, and there is nobody who can’t accept immunisation in my community.”

Traditional birth attendants are in a position to capitalise on their unique access to families to inform and encourage parents to immunise their children. In Isawa village in Bauchi State, Talatu Adamu calls out to a mother in her home. The mother peeps out, emerges with three children and without hesitation hands them over to the birth attendant for immunisation. “When the women see me they are motivated,” Talatu

As a reward, each mother receives a treated bednet to protect her family against malaria, once her children have been fully immunised, and she can show a fully completed DTP record card.
observes, “They trust me since I delivered most of the children. They know I will not bring anything harmful to the children.”

It is a special Immunisation Plus Day in the village of Isawa, and the town announcer’s megaphone shouts out messages about immunisation, calling mothers to bring their children to the fixed post, urging fathers to give consent. Children receive vaccines against polio, hepatitis B and yellow fever. In addition, children are given vitamin A, de-worming tablets and, as a reward for full immunisation, long-lasting insecticide-treated bednets.

It has required a massive and concerted effort from a wide range of people at all levels to turn around a desperate situation in Nigeria to the current success story. From a reported low of 25% in 2003, DTP3 coverage rose sharply in 2006 to a country-reported high of 70% . In Bauchi State, measles incidence was 97% lower in 2006 than in 2005, and the number of deaths from measles decreased from 242 in 2005 to three in 2006, representing a reduction of 98.8% .

Alhaji Muhammed M aigari Lago is proud of what has been achieved in so short a time. The village of Lago achieved 98% immunisation coverage in the latest round of immunisation. It means a brighter future for all he says. “Now that the burden of spending money on measles and other diseases has been reduced, what parents have is being used for the education of their children as well as good clothing.”

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**FACT FILE**

- **Total population:** 141 million⁶
- **Surviving infants:** 5,324,000⁷
- **Infant Mortality Rate:** 109.5 per 1,000 live births⁶
- **Under-five mortality:** 187 per 1,000 live births⁶
- **Per capita Gross National Income:** US$ 560⁸
- **Expenditure on health:** US$ 13¹¹
- **Health worker density:** 2.6 per 1,000 population¹⁰
- **DTP₃ coverage:** 38% ⁹
- **Percentage of districts with more than 80% DTP₃ coverage:** 3% ⁹
Malama Taiatu Adamu, Traditional Birth Attendant in Isawa village
“Whenever I deliver a child, I tell the mother to take the baby for immunisation.”

Hajia Habiba Sabo Gabarin (right), Member of Bauchi State House of Assembly
“A community without healthy children is a dead community.”

The Imam, a religious leader, leads closing prayers after sensitising worshippers to immunisation outside the mosque in Darazo town.
innovative funding
Predictable, long-term financing

GAVI's financial structure is designed to develop predictable, long-term financing, while converting the world’s poorest countries’ need for vaccines into effective market demand. With a stable financial platform supported by a robust, diverse and multi-year donor base, GAVI ensures predictable funding in partner countries. By signalling financial stability and long-term committed financing, it is also possible to spur larger markets, accelerate vaccine development, and promote increased production, availability and lower prices.

Increased funding
By the end of 2006, the GAVI Boards had endorsed a cumulative total of more than US$ 2.2 billion in support to 75 countries (up to 2015). That funding goes to three main areas: 81%, (US$ 1.8 billion) to purchase vaccines; 14% (US$ 306 million) to immunisation services such as transport and cold-chain vaccine storage; and the remaining 5% (US$ 117 million) to funding injection safety.

In 2007, these proportions will shift following discussions with donors, and as the impacts of both the new investment windows for health system strengthening and support for civil society organisations, and those of the frontloaded IFFIm funds are felt. In the future, the balance is likely to stabilise at around two thirds to vaccines and one third to support systems (i.e. health system strengthening, immunisation services and immunisation safety).

2006 saw three important changes in GAVI’s financial arrangements:

- In terms of income, IFFIm, launched in November 2006, brought unprecedented resources for rapid disbursement to priority programmes. Disbursements of approximately US$ 900 million from IFFIm’s frontloaded proceeds will be made in 2007.
- The profile of donor support shifted decisively to multi-year giving, with the majority of donors (53%) now making longer-term commitments.
- The decision in 2006 to move all countries into co-financing for their new vaccines has major implications for the sustainability of immunisation programmes, and represents a significant evolution from the financial sustainability planning conducted in Phase 1 (2000-2005).

In addition, throughout 2006, plans progressed for the launch of the first Advance Market Commitment (AMC) for pneumococcal vaccine: a new US$ 1.5 billion mechanism which is expected to accelerate development, production scale-up and rapid introduction of a vaccine against pneumococcal disease.
The International Finance Facility for Immunisation (IFFIm)

On 7 November 2006, the-then UK Chancellor of the Exchequer, Gordon Brown, officially launched IFFIm’s inaugural bond in London. The launch of this bond – the first ever to fund grants for one specific development purpose – marks the beginning of a new era in development funding. For the first time, a capital markets funding operation is enabling a multilateral organisation to provide grants, not loans, to implementing countries. This has transformed pledges of future sovereign aid donations into an immediate and steady flow of cash.

IFFIm is an important milestone in GAVI’s approach to developing diversified and more predictable ways of funding vaccines, health and development.

An anticipated IFFIm investment of US$ 4 billion over the next 10 years is expected to provide immunisation for an additional half a billion people and save as many as 10 million lives.

A unique approach
IFFIm is the result of an innovative private-public partnership between the development sector, finance communities and donor governments. IFFIm’s sponsor governments now include France, Italy, Norway, South Africa, Spain, Sweden and the United Kingdom. Brazil has announced its intention to join as well.

IFFIm issues triple-A rated bonds which are then bought by investors worldwide. It has a financial base consisting of long–term (10–20 years) legally binding commitments from sovereign donors. The proceeds of the bonds can quickly be used for GAVI programmes. Bond holders are repaid over time by IFFIm.

“This solidarity initiative gives a new vision of international cooperation and a new concept of the relationship between North and South.”

President Jacques Chirac, February 2006

Profile of payment obligations by sovereign sponsors*
(US$ millions as at 31 December 2006)

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<th>Year</th>
<th>United Kingdom</th>
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* In addition to the six funding donors, the governments of South Africa and Brazil expressed the intention to join IFFIm in 2006. South Africa joined IFFIm in March 2007, Brazil is expected to do likewise before the end of 2007.

** Includes France’s first commitment to IFFIm only.

Source: 12
This is the first time that future sovereign pledges have been used as the financial base to issue bonds for immunisation and health systems. The borrowings and risk are handled under prudent financial policies, with the World Bank acting as Treasury Manager. Goldman Sachs acted as Financial Advisor in establishing IFFIm and Deutsche Bank and Goldman Sachs lead-managed the inaugural bond issue.

**Solid offering**
The initial IFFIm issue of US$1 billion was well received by investors around the world. The bonds are rated triple-A by FitchRatings, Moody’s Investor Service, and Standard & Poor’s – a notable achievement for a new entity in the family of supranational issuers.

Importantly, the bonds provide the first ever opportunity for investors to buy an instrument that not only provides a secure market rate of return but also the proceeds of which go directly into grants for a specific development purpose. The value of this proposition is evidenced by the success of the bond itself: the oversubscription, an attractive funding level (a level comparable to sovereign agencies) and ongoing strong price performance in the secondary market.

IFFIm won four awards in 2006, in recognition of its success as a debut issuer and its innovative quality.

**Predictable funding**
One of the great strengths of IFFIm is its financial security over the long-term. Predictable, stable and coordinated aid flow means implementing countries can plan for long-term goals and investments in health such as human resources development. The prospect of stable future demand also encourages investment by vaccine producers, and, in turn, price reductions once more manufacturers enter the market.
**Frontloaded**

Investing the majority of IFFIm resources now — a concept known as “frontloading”— will significantly increase the flow of aid today. This not only ensures reliable and predictable funding for immunisation programmes and health systems for many years to come, but also enables the immediate release of unprecedented resources to countries to support immunisation efforts. To illustrate this principle, it is estimated that GAVI will disburse more in 2007 than the total for the whole of the first five years of Phase 1.

Providing the funds up-front for immunisation can prevent and reduce the disease burden rapidly, thereby saving more lives. This is an essential element of the efforts to scale up progress towards the MDGs.

A table, detailing the funds disbursed in 2006 to countries, is available in Annex 1.

**Saving lives, protecting gains**

The very first IFFIm disbursement of US$ 48 million was made in November 2006 for the purchase of vaccines and immunisation safety equipment.

The first full year of IFFIm proceeds will fund critical infectious disease reduction programmes, (e.g. the Measles Initiative, the Yellow Fever Initiative), a polio vaccine stockpile, and boost the elimination and control of maternal and neonatal tetanus. IFFIm funds will also be used to stimulate increased demand for combination vaccines not currently produced in sufficient quantities, specifically the new “5-in-1” (pentavalent) DTP-HepB-Hib vaccine.

Importantly, IFFIm funds are also helping countries to address as quickly as possible health system “bottlenecks” that currently limit their ability to get vaccines to children. In effect, the IFFIm is therefore already funding GAVI health system strengthening programmes.

### Use of IFFIm funds

**November - December 2006**

- **DTP-HepB** US$ 13.4 million
- **HepB** US$ 4 million
- **Yellow fever** US$ 2 million
- **Injection safety** US$ 0.3 million
- **DTP-HepB-Hib** US$ 28 million

### Expected IFFIm disbursements, 2006-2007

- **Health system strengthening** US$ 92 million
- **Yellow Fever** US$ 38 million
- **Maternal and neonatal tetanus** US$ 49 million
- **Polio** US$ 191 million
- **Measles** US$ 139 million
- **GAVI country-specific programmes** US$ 210 million
- **Pentavalent** US$ 181 million

* einer: 13
Source: 14

* Including vaccines and safety equipment
"The books opened in London at 8 a.m. on Monday the 6th of November," recalls Michael Sherwood, co-chief executive officer of Goldman Sachs International, when speaking of the launch of the first IFFIm bonds in late 2006. "And when the New York market opened, the offer was already fully subscribed."

"Demand for the offer was extraordinarily high so we were able to price it at an extremely attractive level from the issuers’ point of view. More important than these typical measures of a successful offer was the realisation that every bond sold will help save more kids’ lives. For those of us directly involved, this was an incredibly important transaction. For me, it was one I’ll never forget."

In the past, no one would have made a link between development funding and London and New York financial powerhouses, but all that has changed. The issuance of the first IFFIm bond marks a turning point in marshalling the forces of capital funds for development work.

Goldman Sachs, and in particular George Wellde Jr, a senior partner in the firm and a member of the GAVI Fund Board, worked diligently for several years to make IFFIm a reality. Sherwood says it wasn’t difficult to see its potential from the outset. "The concept behind IFFIm is an intriguing fit for our skills and interests, so this was an easy decision," he says.

The impact of this financial revolution was not lost on those involved. "Our people join Goldman Sachs because they have an interest in finance and want to work at the centre of the global flow of capital and ideas," says Sherwood. "The recent IFFIm transaction is a perfect example of how the capital markets can be tapped for the public good."

"Everyone involved in the IFFIm initiative believed passionately in what we wanted to achieve. It was a real challenge to create a structure appropriate for the donor governments and attractive to the market, but the outcome speaks for itself, and we are extremely proud to have been part of it."
This new partnership model between the GAVI Alliance, donor governments and the financial sector shows great promise for the future, according to Sherwood. “Many of the problems facing the world can only be successfully addressed by increasingly effective action by governments and supranational organisations. That is why IFFIm is so exciting for us - we were able to use our personal and institutional expertise in the capital markets to help other organisations better achieve their missions,” he notes.

“No one institution and certainly no one individual could have had this impact on their own. Together, we have made something extraordinary happen.” Sherwood believes it is a new mechanism for raising development funds which shows great promise. “It is easy to get lost in abstraction when discussing capital markets but the IFFIm bond offer demonstrates the power of those markets to effect positive change.”

“We believe that global capital markets should play a vital role in broader economic and social reform. This unprecedented private/public alliance demonstrates just what can be achieved. We hope its success will serve as a blueprint for similarly important initiatives.”

For Michael Sherwood this project has had great personal resonance. He has long been involved in charitable work and believes personal giving is an essential responsibility. “My family upbringing impressed upon me how fortunate we were and how important it was to help others less fortunate. For me,” he concludes, “the opportunity to marshal the resources of Goldman Sachs to help improve the lives of millions of children is profoundly meaningful.”

“(…) every bond sold will help save more kids’ lives. For those of us directly involved, this was an incredibly important transaction. For me, it was one I’ll never forget.”

Michael Sherwood, co chief executive officer of Goldman Sachs International
Progress in 2006

Drive
Leading the new ways of financing immunisation and vaccines are GAVI’s donors and partners, who provide funding, policy direction (through their involvement in governance structures) and leadership.

Sustainability
GAVI’s country partners increasingly are taking ownership of the planning and implementation of immunisation efforts. As the counterpart to this, GAVI’s donor partners assume a proportion of the financial risk and scale up funding.

In 2006, many GAVI-supported countries increased their immunisation financing by as much as 50% - only 15% of which is due to GAVI funds. Immunisation financing is rising and projected to increase further.

A recent analysis of financial sustainability plans (FSPs) from 50 countries shows that, over the past few years, expenditures for routine immunisation have seen an upward trend and are projected to increase in the future - not only to sustain the gains but to scale up coverage, for example, of hepatitis B and Hib vaccination.

Donor base broadened
2006 saw a dramatic increase in donors from 12 to 16 governments and institutions. Australia, Germany, Italy and Spain joined the Alliance as new direct contributors or via their entrance to IFFIm and the AMC. All but one of the G8 member states are now donors.

The total cash received by the end of 2006 was a cumulative US$ 1.88 billion from governments and private donors (US$ 961 million and US$ 920 million, respectively).

There is no indication that, overall, GAVI Phase I resources have displaced other sources of immunisation financing.
Committed
In an important move to bolster the security and predictability of GAVI funds and immunisation efforts, several donors such as Denmark, Ireland and Sweden not only increased their direct contributions to GAVI but also pledged multi-year support. More than half of GAVI’s donors (53%) have moved to multi-year funding, substantially improving GAVI’s planning and forecasting, as well as ensuring longer-term financing.

Engaged
Donor countries are strongly represented on the boards, committees, advisory groups and task teams across the GAVI Alliance’s governance structures. In fact, two thirds of the donors serve in some capacity, providing valuable input to direction, policy-making and future efforts. For example, Canada and the United Kingdom serve on the Fragile States Task Team, while Germany has participated in the Health System Strengthening Task Team forums.

Co-financing
Towards sustainability
As a consequence of a broadened donor base and increased receipt of financial pledges, the GAVI Boards took an important decision in 2006; to move from the shorter five-year vision of Phase 1 to a long-term vision of Phase 2. The aim: to achieve programmatic and financial sustainability by implementing a new policy of co-financing vaccines with all GAVI countries.

The intention of the policy is to provide longer term support for countries; to differentiate on the basis of the ability to pay; to improve prospects of long-term sustainability; and eventually to effect the transition from GAVI support to government and national partner resources. At the same time, this allows GAVI funds to be extended over a longer period to more countries.

The co-financing plans are tailored to country-income groupings. For example, those in the poorest group would aim to contribute US$ 0.20 for a dose of the first GAVI-supported vaccine introduced into their national programme, and for those in the intermediate income group, US$ 0.30.

How does co-financing look from a country viewpoint?

Dr Penelope Kalesha Masumbu,
Child Health Specialist and EPI Manager, Zambia

“In the past, development partners procured vaccines for the immunisation programme so this was not planned for or budgeted within the Ministry of Health’s plan of action. Then, as part of the Financial Sustainability Plan, government committed to paying part of the vaccine cost. This meant that we had to get a budget line for vaccines, and that helped put immunisation on the Ministry of Health agenda as well as into the government planning process. So co-financing has really helped strengthen the position of EPI in the Ministry and the government.

One of the challenges related to co-financing is the cost of the new vaccines. Another challenge is that we have to follow the government budget process. This creates some complications as we have to raise funds for co-financing at the beginning of the year. This is the same time that parliament approves the government budget. This means we have to wait until the budget is approved by parliament before the funds can be released from the Ministry of Finance for activities, and this means that we get the funds late. Finally, the funds that are available for us to use for co-financing are HIPC funds and we are not sure how long these will be available to us for use. This raises concern about the sustainability of the co-financing budget line.

Dr Randriamanalina Bakolalao,
EPI Manager, Madagascar

“We already pay for one antigen through UNICEF. That self-payment means that vaccines have received a budget line in the national budget.

If something is free, no-one really values it. The payment has helped to underline the value of immunisation at all levels, including the government, and it has helped understanding and ownership of the immunisation programme to increase dramatically.”
In 2006, Ghana, Madagascar, Malawi, Rwanda, the United Republic of Tanzania, Togo and Zambia were already co-financing GAVI-supported vaccines. Guyana had fully transitioned from GAVI Phase 1 support of the pentavalent vaccine by assuming 100% of the cost of the vaccine from government and national partners’ resources. In Phase 2, all countries applying for new vaccines will be expected to co-finance the GAVI-supported vaccines from the onset of GAVI support.

Attempts to reach more children and with newer vaccines have resulted in the cost of immunisation programmes increasing. A substantial part of this increase stems from the price of the vaccines themselves. Additional costs arise from investments in immunisation systems to deliver the vaccines.

Although most of the vaccines that are considered for introduction in the poorest countries are among the most cost-effective health interventions, the tension between introducing these vaccines and affordability is growing. The co-financing policy is intended to mitigate those tensions. Indeed, initial analysis of the implications of vaccine purchase for government health expenditure indicates that for some 90% of GAVI countries, the long-term costs of introducing a full package of new vaccines will represent less than 2% of planned health expenditure.

**Advance Market Commitment (AMC)**

Throughout 2006, at the request of the G8 finance ministers, GAVI and the World Bank, led by the Government of Italy, developed another new funding mechanism known as the Advance Market Commitment, or AMC. This initiative aims to spur more rapid development of priority new vaccines and technologies, ensuring accelerated availability for developing countries.

**The ‘pull’ effect**

Currently, due to cost, risk and scientific challenges, vaccine development is predicated on the prospect of secure markets. Markets in developing countries, however, are often viewed as too small and unpredictable, resulting in little research and development on diseases that predominantly affect the population of the world’s poorest countries. By having donors...
express interest in purchasing once a vaccine is available at a certain price and formulation, the AMC has the effect of securing long-term markets for much-needed new products. The AMC provides the solid commitment necessary to ‘pull’ manufacturers towards investment in development and production of these vital vaccines.

**Affordable pricing**
Manufacturers commit at the outset to producing a vaccine at a lower “tail price” which is affordable to developing countries. With secure future markets, developers and manufacturers can be expected to invest in more efficient, larger-volume facilities, enabling lower costs per dose that can be passed on as lower prices.

**Market incentives**
The AMC mechanism is open to all players in the field of vaccine development, from multinationals to emerging manufacturers that meet the standards established by the AMC. The aim is to maximise competition for price and innovation, allowing countries to ‘demand’ the product which best meets their needs. Funds will only be used to buy vaccines if there are results and demand: there is no commitment from the AMC for upfront funding of research and development or production. Interested parties will be required to apply with a candidate vaccine and will be reviewed by an Independent Assessment Committee as to whether they meet the specified standards.

**Pilot project**
By the end of 2006, plans for a pilot AMC had been formulated by GAVI and the World Bank in partnership with lead donors, for launch in early 2007. This initial pilot aims to stimulate industry competition to develop and produce sufficient quantities of a vaccine against the strains of pneumococcal infection most prevalent in the poorest countries.

By committing US$ 1.5 billion in donor funds to purchase a product meeting the technical specifications, the AMC is expected to accelerate development, production scale-up and rapid introduction of a vaccine against pneumococcal disease by 2010.

**Achieving the MDGs:**
Pneumonia is the leading infectious cause of child mortality worldwide. It is responsible for nearly 2 million, or nearly one fifth, of the estimated 10 million child deaths each year. Without any intervention, there is no prospect of a pneumococcal vaccine reaching the world’s poorest countries before about 2023.

The AMC initiative is expected to result in between 70 million and to 100 million immunised children over the lifetime of the AMC, preventing up to 700,000 deaths. The MDGs call for a reduction in child mortality in the under-fives by two thirds by 2015. Only through development of an effective vaccine, along with other accelerated efforts, is there hope that this goal can be achieved.

“**Infectious diseases are responsible for a third of all deaths worldwide, killing at least 15 million people a year... The most effective way to reduce disease and death from infectious diseases is to vaccinate susceptible populations.**”

WHO, “State of the art of new vaccine research and development” 2006
Researchers from Harvard University School of Public Health authored a report on the value of vaccination. This study estimated the rate of return on GAVI’s prospective investment to be 12.4% in 2005, rising to 18% in 2020, as coverage increases

and vaccine costs decline. This is a similar or better rate of return than that for primary education - long known to have direct effects on economic growth.

Strengthening health systems
A GAVI Alliance study in 2004 concluded that the majority of developing country partners had been unable to successfully implement immunisation programmes because of health system constraints such as lack of human resources, inadequate transport and logistical problems. To address these basic obstacles meant going beyond immunisation funding to assist governments to strengthen their overall health systems, in keeping with the principle of country ownership and harmonisation. The aim was to enable countries to achieve the maximum impact at the periphery on bottlenecks in the health workforce to increase and sustain high immunisation coverage.

The principles of this funding are strongly country driven, and focused on what is most appropriate for specific contexts. Other critical themes are those of alignment and harmonisation: all proposals must be aligned with countries’ existing budget cycles and with existing health sector objectives and strategies, management systems and coordination mechanisms. All key stakeholders are to be involved with the proposal development and implementation, and special efforts should be made to ensure civil society and private sector participation.

In 2005, the GAVI Alliance Board approved US$ 500 million to be invested between 2006 and 2010 for health system strengthening. The first round of applications in November 2006 resulted in 15 countries applying for funding. The first five of these countries - Cambodia, Burundi, Ethiopia, the Democratic People’s Republic of Korea and Kyrgyzstan - will receive a total of US$ 92 million. Another five received approval with conditions to be met for funds to be released. A further 30 to 45 countries are expected to apply in the near future.

Funding is based on the number of newborn infants in a given country. Once approved, the funds will be disbursed quickly to countries - in as little as three months - for flexible, non-exclusive grants to support the health workforce; supply, distribution and maintenance; and organisation and management.

This work on health system strengthening is also an integral part of the broader health system agenda and links with GAVI’s engagement with the “Scaling Up for Better Health” and related initiatives on alignment and harmonisation.

Ensuring transparency and accountability
GAVI is engaged in consultations among the Alliance partners to develop mechanisms to further strengthen programme monitoring and resource accountability at the country level. The basic concept of the funding strategy is to give the maximum discretion to countries to implement funds as they see fit. However, any infraction of the rigorous accountability standards is immediately investigated, and funding can be stopped.

“Innovative investment

As well as improving health, vaccines have long-term effects on the development of an individual. These individual effects, which are produced at remarkably low cost, are likely to translate into lasting impacts on economies.”

Bloom D, Canning D, Western M, World Economics, 2005
While remaining true to the principle of country ownership, the transparency and accountability objective is to strengthen country performance, enhance stewardship of donor funding, and improve long-term financial planning. Additionally, this diagnostic and support capacity will help the GAVI Secretariat to identify problems at country level, provide technical support to countries to tackle bottlenecks, and locate any misappropriation of funds.

The way forward

Outreach
GAVI is looking to broaden the mix of traditional donors, including middle-income countries and private donors. The prospect of philanthropic investment has seen a major boost with the arrival of IFFIm. In the future there is scope to build on the growing realisation that financial vehicles for development are not just a good buy but good for the world’s children, too. As more donors see the effectiveness of this mechanism, more are expressing interest in involvement.

A private fund-raising strategy was approved by the GAVI Fund Board in December 2005, targeting major private donors, with an initial emphasis on the United States of America. The campaign also aims, through 2007 and beyond, to build a vocal community of leading private philanthropists dedicated to enhancing the health of children.

Harmonising HSS
New funding for health systems strengthening will begin to have an impact at country level. However, GAVI must ensure that its efforts are harmonised across all global health partnerships and that impact is consistent and integrated in countries. It is vital to reduce transaction costs to governments, such as for applications and monitoring.
Emerging from the ravages of three decades of war in the early 1990s, Cambodia has made great progress towards increasing immunisation coverage. Currently, about two thirds - 67% - of children are fully immunised, up from 39% just five years ago. Rather than rest on the success of their efforts, however, Cambodian officials are planning ahead to ensure they reach the one-third of children who remain unvaccinated.

Cambodia was the first country in south–east Asia to receive Immunisation Services Support (ISS) funding from GAVI in 2001, and one of the first to apply for and receive funding from GAVI for Health System Strengthening (HSS) in 2006. The process of preparing the application for HSS funding spurred wide consultation to identify bottlenecks and obstacles in the existing system. Many of the constraints to increasing immunisation coverage were found to be related to the structure and function of the health system as a whole. “GAVI’s HSS funding window represented a timely opportunity for Cambodia to get funds to address the real challenges we face to scaling up immunisation services even further,” says Dr Lo Veasnakiry, Director of Planning in the Cambodian Ministry of Health.

The HSS proposal development process has also been a successful exercise in multisectoral partnership. The Ministry of Health convened a working group with representatives of the Department of Planning, National Immunisation Programme, Department of Finance, Ministry of Finance, WHO, UNICEF and PATH. It was chaired by the Deputy Director–General for Health, and the Department of Health Planning and Information managed the operational aspects of the proposal development.

The working group conducted national and regional consultations, selecting priority health districts for their focus. Details of the proposal were developed in close consultation with these districts and their provincial managers through site visits and regional workshops. The proposal was reviewed by a national consultative workshop with involvement of national level departments and donor agencies, and received final approval by the Ministers of Finance and Health, respectively.

The overall goal of the HSS programme is to improve immunisation coverage and child survival by strengthening the health systems at the district level. “A cornerstone of the HSS project will be the use of performance-based management
agreements at all levels – province, district and health centre,” says Dr Veasnakiry.

“Cambodia already implements a wide variety of models for quality improvement through performance incentives and contracts in health districts and facilities. These range from contracting of district health services to partners such as NGOs, to the establishment of equity funds to pay for services to the poor, to several merit and performance-based pay initiatives, including GFATM [The Global Fund to fight AIDS, Tuberculosis and Malaria]-supported performance incentives at the central, provincial and health centre levels. The HSS performance-based management system builds upon this experience and is designed to complement existing initiatives and fill gaps in coverage.”

The consultations also identified the need to increase awareness and create demand for immunisation. These are seen as critical components in increasing health service coverage and use. Mobilising the local population through tailored messages and interventions is effective and crucial to success. “This can for example be done through encouraging participation of community members, traditional birth attendants and local authorities, who all know the communities well,” observes Dr Veasnakiry.

“Local area communication strategies to mobilise people to use the services that will become available are therefore a key component of increasing immunisation coverage in Cambodia, and are included in the HSS proposal.”

“We are confident that with the HSS funding, we will be able to reach people whom we have previously not been able to help with services,” concludes Dr Veasnakiry.

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### FACT FILE

**Total population:** 14 million\(^ {17} \)

**Surviving infants:** 362,000\(^ {18} \)

**Infant Mortality Rate:** 63 per 1,000 live births\(^ {17} \)

**Under-five mortality:** 89 per 1,000 live births\(^ {17} \)

**Per capita Gross National Income:** US$ 380

**Expenditure on health:** US$ 36\(^ {19} \)

**Health worker density:** 1 per 1,000 population\(^ {20} \)

**DTP\(_3\) coverage:** 82\%\(^ {21} \)

**Percentage of districts with more than 80\% DTP\(_3\) coverage:** 45\%\(^ {21} \)
Delivering results through alliance

It is projected that by the end of 2006, a total of more than 2.3 million future deaths will have been prevented through GAVI Alliance support, and the actions of those in the Alliance.

These results are a tribute to all those who made this happen – from those on the ground administering the vaccines, those in the supply chain who get the transport and storage right, in the planning stages getting the logistics and strategies right, all the way through to those at the political level, who provide the thought leadership, direction and funding to mobilise and sustain action.

Each element in the complex web is a vital link, and each relies on the success of the others to achieve the end result of sustainable growth.

As at December 2006, 56 eligible countries had received support for vaccine safety: 61 had received hepatitis B vaccine; 24 received *Haemophilus influenzae* type b (Hib) vaccine; and 23 had received yellow fever vaccine. Additionally, 53 countries had received funding for general immunisation services support.

WHO projections indicate that by the end of 2006, some 28 million additional children will have been protected against diphtheria, tetanus, and pertussis (DTP) through GAVI support, helping to increase overall immunisation rates for these diseases from 63% in 1999 to a projected 77% in 2006.

The immunisation delivery system is a crucial contributor to helping women and children access health care better. For many it is one of the few times that they visit health care providers, and is an important opportunity for exchange of information and for advice.

138 million additional children are projected to have received new and under-used vaccines, such as those for hepatitis B, Hib, and yellow fever, helping to increase protection against these diseases and thereby saving millions of lives.

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**DTP, coverage in GAVI eligible countries, 1999—2007**

Sustained increase in coverage in the African Region

<table>
<thead>
<tr>
<th>Year</th>
<th>GAVI eligible countries</th>
<th>African Region</th>
<th>Projections</th>
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</tbody>
</table>

Source: 22
Progress in vaccinating against hepatitis B

Hepatitis B is a public health problem worldwide, causing an estimated 600,000 deaths annually. An effective vaccine against hepatitis B became available in 1982. However, its prohibitive price meant that uptake of this vaccine outside Europe and North America was low until GAVI’s support for underused vaccines was made available.

In the central and eastern European countries, hepatitis B vaccine coverage remained low, only 1–2%, throughout much of the 1990s. GAVI support, made widely available from 2000–2001 onwards, boosted the vaccine’s availability in the region, and led to dramatically increased coverage rates. Non-GAVI eligible countries in the region followed the success of their GAVI-supported neighbours, and also made the vaccine available through their routine immunisation programmes, ensuring sustained high coverage.

WHO projections indicate that, by the end of 2006, an additional 126 million children had been immunised against hepatitis B in GAVI-supported countries.
WHO projections indicate that, by the end of 2006, an additional 20 million children had been immunised against *Haemophilus influenzae* type b in GAVI–supported countries.

**Mongolia:**

Hib coverage

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<tr>
<td>2006</td>
<td>56%</td>
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</table>

**Progress in vaccinating against *Haemophilus influenzae* type b**

Infections due to *Haemophilus influenzae* type b (Hib) are a major cause of morbidity and mortality in young children throughout the world. Hib is typically the leading cause of acute bacterial meningitis in infants and children less than five years old, accounting for one third to one half of all cases of bacterial meningitis in this age group.

Vaccination against Hib was introduced in Mongolia as part of the switch to the 5–in–1 pentavalent vaccine. Mongolia is the first GAVI–eligible country ever to introduce pentavalent vaccine in Asia.

GAVI has supported its introduction in Mongolia since 2005. Government provisional data reported to WHO/UNICEF estimate coverage to have increased from 28% (in 2005) to 56% at the end of 2006.

The key reason for the rapid scale up is the immunisation infrastructure which is already functioning well, evidenced by the country’s 99% DTP$_3$ coverage rate.
Progress in vaccinating against yellow fever
Yellow fever is a viral haemorrhagic fever transmitted by mosquitoes infected with the yellow fever virus. The disease can only be treated symptomatically, and case–fatality rates in severe cases can exceed 50%. Yellow fever can be prevented through immunisation. The vaccine is safe, inexpensive and reliable. A single dose provides protection against the disease for at least 10 years and possibly throughout life.

The Democratic Republic of the Congo is a fragile state. War officially ended in 2003 and the majority of the population lives in extreme poverty. Inability to maintain vaccination programmes has led to outbreaks of vaccine-preventable illnesses.

GAVI support to The Democratic Republic of the Congo started in 2003. Since the introduction of yellow fever vaccine, the coverage has come close to the measles (70%) and DTP3 (73%) coverage and a further increase is expected in future.

WHO projections indicate that, by the end of 2006, an additional 17 million children had been immunised against yellow fever in GAVI–supported countries.
Countries implementing GAVI funds

Approved support to countries, 2000—2006

Injection safety 11%
New and underused vaccines 67%
Immunisation services 22%

Source: 26
Indicators of change in GAVI countries

Over the first five years of its existence, the GAVI Alliance steadily increased the number of countries using hepatitis B, Hib and yellow fever vaccines to protect their populations.

In 2006, that progress accelerated: coverage of hepatitis B and Hib grew dramatically as several more countries used GAVI funding to expand access to immunisation. As the numbers of vaccinated children grow, so do the numbers of deaths averted. WHO projections indicate that expanded immunisation had prevented an estimated 600,000 premature deaths in 2006 alone.

**Hepatitis B coverage: a dramatic increase**

![Graph showing hepatitis B coverage](image1)

Hepatitis B coverage in all GAVI countries grew from 5% before GAVI Alliance support, to nearly 60% projected in 2007. The number of children unimmunised against liver disease has decreased year by year, from 83 million in 1999, to an anticipated 38 million by 2007.

Source: 27

**Hib immunisation: sees real gains in 2006**

![Graph showing Hib immunisation](image2)

In GAVI's early years, interest in use of the new Hib vaccine was cautious. Progress began to pick up in 2002, with steady growth in 2005, and a sharp increase in 2006, to a projected 24% coverage by 2007. Again, there has been a remarkable change in the number of children who are not immunised: a drop from 87 million in 1999, to a projected 68 million in 2007.

Source: 28

**Yellow fever: coverage sustained**

![Graph showing yellow fever coverage](image3)

Levels of yellow fever coverage grew steadily in GAVI's first five years, from 13% in 1999, to a stable level of 35% in 2005, where it is projected to remain until further countries apply for support.

Source: 29

These data show that countries are successfully protecting increasing numbers of children against these specific diseases. They also indicate that countries' health systems are perhaps beginning to operate better, as supported by DTP, coverage data for GAVI countries. This has risen from 63% in 1999 to a projected 79% in 2007.
Vaccine prices are important for the sustainability of national immunisation programmes. It was originally anticipated that those prices would fall within the first five years of GAVI’s operations. In practice, this has taken longer, although significant declines are now being seen in the price of DTP-HepB vaccine. One of the reasons for this price drop is the increasing number of producers entering the market. A second positive effect of this trend is an enhanced security of supply.

In 2006 almost 30% of all the vaccine doses purchased by UNICEF for the GAVI Alliance came from developing country manufacturers.

Gavi’s policy of insisting on AD single-use injection equipment for all supported vaccines institutionalised safe immunisation practices and contributed to AD syringe prices almost halving since 1997, through economies of scale. By the end of 2006, a total of 69 countries had received GAVI support for injection safety and for safety boxes for syringe disposal.

Since the GAVI Alliance inception, spending on routine immunisation has risen from all sources. This graph shows the additionality of GAVI funding at country level.

New financing from sources such as IFFIm addresses countries’ need for long-term funding that is predictable and sustainable. This funding, approved by the Boards up to 2015, will expand in 2007 to reflect new, broader areas of work, such as health system strengthening.

* source of all graphs in Annex 3, page 78
innovative technologies for equity
Catalysing vaccine development

It is estimated that, since 2000, GAVI–funded immunisation in developing countries has already prevented approximately 2.3 million future deaths. Between 2006 and 2015, 10 million more lives could be saved through child and maternal immunisation.

“Our determination is stronger than ever to make measles history by further strengthening our measles control activities, working in concert with our international partners and setting aside resources.”

Mr U Olanguena Awono, Minister of Public Health, Cameroon, 2006

Vaccines are one of the greatest medical tools of our time. In recent history, for example, immunisation has eradicated smallpox, reduced the global incidence of polio by 99% and dramatically decreased illnesses and deaths due to a range of other diseases.

Improving equity
Immunisation is key to reducing child mortality and has substantial health and economic benefits that contribute to the elimination of extreme poverty. As such, it plays a significant role in achieving the MDGs. For example, immunisation assists in achieving universal primary education by helping to ensure the health of girls and boys so they will be able to attend school. Immunisation also reduces the presence of circulating viruses and bacteria, easing strains on health-care systems and saving money which can then be used for other health services.

Achieving the MDGs
This is at the heart of GAVI’s work. The Alliance aims to scale up activities to meet the MDGs, particularly goal 4: to reduce mortality of children under five years by two thirds by 2015 (from 1990). Already in sub-Saharan Africa the latest data show that 73% of all newborn infants are now covered by immunisation, which is a remarkable achievement for the GAVI Alliance and a major step forward in improving health in that region. Without increased immunisation, however, the MDG goal will be difficult, if not impossible, to reach, given the fact that 25% of the 10.5 million annual child deaths are a result of vaccine-preventable diseases.

Advancing a generational leap in health
Through innovative funding and technology, it is possible to dramatically cut short the lengthy development-to-injection time for new vaccines. What took many developed countries decades to achieve in child immunisation coverage, is now
possible to reach in a few years for the world’s poorest, given strong delivery systems.

Catalysing new and emerging vaccines
GAVI has developed new ways to dramatically shorten the time between development and availability of vaccines. Accelerated Development and Introduction Plans (ADIPs) represent a unique approach to reducing the typical 15–20-year lag time between introduction of new vaccines in wealthy countries and their availability in the developing world.

ADIPs work by developing a solid investment case for a vaccine. This includes an accelerated introduction plan, an expected demand and price estimate, and an estimate of lives saved and cost-effectiveness. When married with the new AMC financing mechanism, which works to guarantee future markets and affordable prices, GAVI expects significant advances in availability of new vaccines for the developing world in the near future.

Improving supply of existing vaccines
GAVI works to ensure increased supply of existing vaccines such as those against hepatitis B, Haemophilus influenza type b, and yellow fever, and to improve availability and use of combination vaccines. The new IFFIm funding mechanism is providing US$ 181 million for pentavalent vaccine development, which will have a major impact in 2007.

Supporting not just the new vaccines, but also the underused: measles

In partnership with the Measles Initiative, GAVI helps to expand access to a safe, effective and inexpensive vaccine that still remains a luxury for many children in the world’s poorest countries. Although the vaccine has been available for the past 40 years, measles remains a leading cause of child mortality. Before the creation of the Measles Initiative in 2001, measles was still the pre-eminent cause of vaccine-preventable child death globally.

In 2006, Measles Initiative partners announced that the target set to reduce global measles deaths by 50% in 2005 had been reached and exceeded. By the end of 2005, global measles deaths had been reduced by a record 60%, relative to 1999 estimates. Measles mortality decreased by 75% in the African Region, where over 50% of global mortality had occurred before the Measles Initiative started.

With GAVI’s support, this success continued in 2006. The Measles Initiative-sponsored campaigns reached nearly 77 million children in 22 African countries. GAVI contributed over US$ 17.6 million for 2006; funding which was used to provide vaccine, and to cover operational and technical support costs for campaigns in 18 African countries. Several of these countries, including the Democratic Republic of the Congo, Ethiopia and Nigeria, had very large at-risk populations prior to this campaign outreach.

The Measles Initiative supports developing country governments with financial, technical and operational assistance to provide a second opportunity for all children to receive measles vaccine. These campaigns also strengthen disease surveillance systems and deliver additional interventions, from vitamin A to boost children’s immune systems, to insecticide-treated bednets to prevent malaria.

Despite this success, measles remains a pressing problem for many countries; it is estimated that in 2005 alone, measles caused 345,000 deaths. GAVI will continue to provide time-limited support to the Measles Initiative to assist achievement of its new goal: to reduce global measles mortality by a record 90% by 2010. In 2007, US$ 139 million of IFFIm funds will go to supporting the immunisation of nearly 240 million children in supplementary campaigns.

“With the exception of water sanitation, no other modality has had such a major effect on mortality reduction and population growth.”

WHO, State of the art of new vaccine research and development, 2006
Forecasting demand
GAVI is working with countries and technical partners at the global level to better predict demand for existing vaccines. The aim is to improve future planning in cooperation with vaccine producers to ensure steady, sustainable production, availability and lower prices, resulting from a better match of demand and supply.

Tracking the vaccine pipeline
GAVI, in cooperation with WHO, has begun tracking the evolving vaccine pipeline. This provides all partners with up-to-date information on the status of product development for a number of key current and future vaccines, as well as epidemiological data on the need for vaccines in countries. This enables more accurate future planning and resource allocation at global and national levels.

A country-based approach
With a range of new vaccines emerging for countries to choose from, it has been important to look at the options in an integrated way.

Shaping the market
GAVI’s new finance mechanisms are building solid funding sources, and fostering stable future markets and lower prices. More accurate forecasting of demand and development also increases stability. This more predictable marketplace is encouraging many existing manufacturers to develop new products, resulting in lower prices, increased volume and improved availability. The evolution of the relationship between GAVI, purchasers and vaccine manufacturers is creating a more open marketplace.

Ensuring injection safety
Most immunisation infections are due to re-use of injection equipment. To address this barrier, GAVI provides grants to countries to order autodisable (AD) syringes – which cannot transmit blood-borne pathogens – for all vaccines. Currently almost all

“When they grow up, I want my children to get a good education, so that they can get a job and earn money, and have an easier life than I have had. Being healthy is a first step to achieve that.”

Meseret Tehome, Ethiopian mother of five children, 2007
GAVI-supported countries use AD syringes. By the end of 2006, a cumulative total of US$ 106 million had been approved for 69 countries for injection safety support.

There is continuing interest from countries in sustaining immunisation safety. Even those countries which have “graduated” from GAVI support (the programme is for three years of support) are continuing to buy AD syringes, using either government funds or alternative donor resources.

In addition to the added health safety assurances, the increase in volumes being manufactured has driven down the price for AD syringes by nearly half (to US$ 0.05 each, weighted average price), and driven up demand for vaccines.

**Progress in 2006**

Vaccine development, production and technology made great advances in 2006. Significantly, the first successful ADIP application resulted in approval from the GAVI Alliance Board for financing of vaccines against rotavirus and pneumococcus.

The year saw the introduction and progress of new financing mechanisms such as IFFIm and AMCs, while the vaccine pipeline contributed to improving the efficiency and effectiveness of the long-term planning process.

The GAVI Alliance Board in November 2006 approved an investment of US$ 200 million to help an initial group of countries introduce newly licensed life-saving vaccines against rotavirus diarrhoea and pneumococcal pneumonia.

Together rotavirus and pneumococcal disease are responsible for 1.5 million child deaths each year - or about 15% of all deaths among children under the age of five years. New vaccines against rotavirus and pneumococcal infections are now available and are routinely used in many industrialised countries but not yet in developing countries.

The decision taken by the Board in November 2006 addresses key issues for children in developing countries, and for vaccine manufacturers:

- The Board’s decision makes funding for these vaccines available for GAVI countries sooner than ever before. It shaves 5-10 years off the historical precedents for putting new vaccines into use in developing countries.
- The resources made available will enable the introduction of these vaccines in “early adopter” GAVI countries. Introduction activities will be supported by Alliance partners and will inform the shape of scale-up efforts for a broader introduction after 2010.
- The addition of these two vaccines to the GAVI portfolio sends positive signals to industry: that GAVI is committed for the long-term and that there is a sustainable market in the poorest countries for these vaccines.

The GAVI Investment Case decision will allow the early adoption of the existing 7-valent vaccine as early as 2008. The AMC of US$ 1.5 billion administered through GAVI will encourage the development of “extended protection” vaccines (e.g., vaccines that have 10 or 13 serotypes). It will assure the expansion of capacity, and accelerate the process of affordable, sustainable vaccine supplies as early as 2010. These extended protection vaccines are expected to include the strains that account for 70%–90% of childhood pneumococcal disease worldwide. Together these financing mechanisms have the potential to prevent 5.4 million child deaths by 2030.
This achievement was the result of three years of work through the Accelerated Development and Introduction Plans (ADIPs), which were based at Johns Hopkins Bloomberg School of Public Health, and PATH. With funding from the GAVI Alliance, these partnerships worked with WHO and the United States Centers for Disease Control and Prevention and other GAVI partners to accelerate and improve decisions on rotavirus and pneumococcal vaccines.

**Funding vaccine development**

The launch of the IFFIm in 2006, and recent progress towards an AMC for pneumococcal vaccine are creating a more secure future for vaccine development, production and distribution.

The predictability of funding afforded by the IFFIm is a key leverage point in the marketplace. It will strengthen negotiating power for lower prices, while encouraging increased competition and new players into the market, which in turn also support lower prices and increased availability. For example, the demand for DTP combination vaccines has long exceeded supply. With new suppliers entering the market, countries have much improved availability.

The IFFIm is also already generating direct benefits. In 2007, US$ 181 million will be invested in securing supply of a new fully liquid pentavalent vaccine.

The AMC will have a ‘pull’ effect on research and development of vaccines by securing future markets for their purchase. With advance assurances from GAVI and donors to fund procurement and introduction of a new vaccine at a pre-agreed price, vaccine manufacturers can confidently develop and produce vaccines that otherwise might not have been economically viable.

The first AMC pilot project, approved in late 2006 for launch in 2007, will focus on development of a vaccine against strains of pneumonia most prevalent in developing countries. The first vaccine anticipated to meet the AMC standards is expected to be available in 2010.
Lowering vaccine prices

The entry into the market of new manufacturers and emerging suppliers has supported a decline in vaccine price. For example, the price of the combined DTP and hepatitis B vaccine (DTP-HepB) has dropped by a substantial 40% since 2001. Three manufacturers are now pre-qualified by WHO for this product, with a number of additional manufacturers possible in 2007.

While pentavalent DTP-HepB-Hib vaccine prices have remained stable, there are strong indications of new products and new producers, and thus lower prices, in the years to come.

The initial expectations of rapid price declines within the first five years were overly optimistic. Experience has shown that, although prices do eventually decline, the process takes more time as new players - especially those from developing countries - enter the market. The presence of multiple suppliers in the market is critical to vaccine security.

Since 2001, UNICEF has procured vaccines from developing-country vaccine manufacturers for GAVI-eligible countries. In 2006, almost 30% of all the vaccines purchased by UNICEF for GAVI were manufactured in developing countries. This proportion is likely to increase as the number of developing-country vaccine manufacturers pre-qualified by WHO is anticipated to rise in the coming years.

To increase the availability, affordability and quality of vaccines produced by the developing world, the Developing Countries Vaccine Manufacturer Network (DCVMN) was created. Currently including 20 members, the network operates as an affinity group of vaccine producers from developing and middle-income countries globally.
Dr Akshay Goel has always been passionate about vaccines. “They offer tremendous value to the customer,” he says. “This is because the vaccine works along with the human immune system, and essentially acts as a catalyst. A vaccine at a cost of US$ 1 can provide protection for 10 years against a deadly pathogen.”

Dr Goel left India to pursue a PhD in biochemical engineering in the United States, subsequently working on vaccine development with Baxter, and then on pharmaceutical manufacturing for Pfizer for ten years. He is now back in India and has taken up the post of Additional Director in charge of Hib vaccine production at the Serum Institute of India, Ltd (SII), in Pune.

Dr Goel returned to India nearly two years ago, riding on the wave of increased investment and rapid growth in the Indian biotech industry. His employer, SII, has been a part of the emerging and expanding market for vaccine production seen in a number of developing countries, notably in India, but also strongly evident in Brazil, China, Cuba, Indonesia, the Republic of Korea, Senegal and Viet Nam.

As the world’s largest manufacturer of MMR and DTP vaccines, SII is the largest supplier to India’s Expanded Programme on Immunization. Additionally, it is India’s biggest vaccine exporter, supplying 138 countries. It is estimated that its vaccines are used for nearly half of all children vaccinated globally. This volume allows SII to produce and sell vaccines at lower prices. The overall result is that supply is increased, prices are lowered, the market is expanded and, most importantly of all, more children get vaccinated.

In 2007, SII will launch the first Indian-developed and produced Hib vaccine, and notes that it has the capacity to produce 150 million doses a year at a substantially lower price. Once the vaccine is WHO pre-qualified, international health organisations such as GAVI, UNICEF and the Pan American Health Organization would be able to acquire high quality Hib vaccine at affordable prices, enabling the prevention of one of the developing world’s leading causes of infant death – pneumonia. Dr Goel predicts the technology developed for the Hib vaccine will yield other vaccines too. He says it “offers a technology platform that can generate not only Hib conjugates, but also meningococcal and pneumococcal conjugates, that can fulfill critical global vaccine needs.”

GAVI’s goal since inception has been to contribute to shaping a broader, healthier global vaccine market.
to improve vaccine affordability. Recently this has included the long-term predictable funding offered by IFFIm funding, the AMC to ‘pull’ development and production of new vaccines with the prospect of markets to purchase them, and work to better forecast and model markets.

Dr Goel says GAVI’s work to stabilise the market had an impact on SII’s development of the Hib vaccine. “Since GAVI was concentrating its efforts in exactly the same direction as our thoughts we were more motivated as we felt we would have a global support in the utilisation of vaccines that we would endeavour to make.”

Dr Goel says he has absolutely no regrets about returning to India, and hopes the burgeoning biotech industry brings more of his fellow expats home. “I am aware of several friends and colleagues who are also interested in coming back to India after spending time in the US,” he says. “Over the past five years, India has truly become a global player, and this provides opportunities that have their own benefits.”

Not least of which, of course, are more children vaccinated, no matter where they live.
Creating future stability
In 2006, GAVI began a process to better plan for the vaccines anticipated to become available in the coming 5–10 years. It was evident that, for efficient future planning for GAVI, its partners, the vaccine industry and in particular partner countries, it is important to have access to critical information about vaccine development, production and demand. Without it, as was discovered with Hib vaccine, the result can be a vicious cycle of uncertain demand, insufficient supply and high prices. The refinement of a vaccine pipeline paper, led by WHO, has been strongly instrumental in clarifying and consolidating information in this area.

Additionally, forecasting has been greatly enhanced by a new computer model developed in cooperation with WHO, the World Bank and other partners in the GAVI Alliance. This sophisticated tool examines the timing of new vaccine availability, uptake and pricing. Using information on countries’ projected needs for vaccines, it enables comparison of likely future vaccine costs with future budgets. This has already had a considerable impact on broad strategic planning and policy-making.

Critically, the information from this model has supported the work done to transition GAVI’s policies for supporting the introduction of new vaccines into countries from 2007 onwards. It has underpinned the planning for the new co-financing strategy, demonstrating the funding support needed for the secure long-term purchase of new vaccines without adverse effect on countries’ health budgets, and supporting gradual financial independence.

Improving forecasting and planning increases the ability to catalyse change in the market, as well as accelerate comprehensive introduction of a vaccine. It ensures governments have solid epidemiological and long-term and short-term pricing data. Donors now have more of the global and national data necessary for providing financial support; and industry has the information and incentive to ensure adequate future capacity. The result will be a more reliable supply of quality vaccines, at affordable prices, as rapidly as possible, that is sustainable over the long-term.

Ensuring safety
Three-year grants are offered to countries to incorporate autodisable syringes into their immunisation programmes. By the end of 2006, a total of 69 countries had received GAVI support for injection safety and for safety boxes for syringe disposal.

The way forward

New vaccines, new challenges
The exciting new vaccines for rotavirus and pneumococcal disease will challenge the partnership to ensure broad support for country implementation. In addition, these new vaccines are physically bigger and bulkier. That is going to make storage along the cold-chain and distribution more difficult than for previous vaccines.

Other new vaccines in the pipeline may present similar issues that will need to be predicted and accounted for. Managing the complexity of the vaccine pipeline and clarifying the financial and programmatic options for countries is a significant task for 2007.

Filling information gaps
The emerging vaccine pipeline helps identify information gaps, such as the need for improved data on disease burden in many countries and regions. The pipeline illuminates future opportunities in vaccine development and foreshortened development to distribution time. It also brings into focus the issues ahead such as ensuring the long-term affordability of new vaccines.

Reviewing the accelerated development and introduction plans
The ADIPs will continue to create a stable and enabling environment for development of new vaccines. There is promise, for example, for a meningococcal vaccine against meningitis in the near future.
GAVI governance structure
Governance structure

The GAVI Alliance consists of five separate entities, combined under the single leadership of the Executive Secretary and CEO. Each plays a specific and unique role.

- The GAVI Alliance
- The GAVI Fund
- The International Finance Facility for Immunisation
- The GAVI Fund Affiliate
- The GAVI Foundation

In addition, a number of committees, working groups and task teams support the work of these entities.
The GAVI Alliance

The Alliance is an unincorporated public-private partnership launched in 2000. It comprises partners including UNICEF, WHO, the Bill & Melinda Gates Foundation, the World Bank, developing country governments, donor country governments, the vaccine industry, civil society organisations, and research and technical health institutes. A secretariat, based in Geneva, coordinates Alliance activities including policy development and support to countries.

The GAVI Alliance Board governs policy development and implementation, and monitors and oversees all programme areas. The Board includes four renewable members: UNICEF, WHO, the Bill & Melinda Gates Foundation, and the World Bank. In addition, there are 12 rotating seats: four for developing country governments, four for donor country governments, and one each for research and technical health institutes, industrialised country vaccine industry, developing country vaccine industry, and civil society organisations.
The GAVI Fund

The GAVI Fund is a not-for-profit organisation based in the United States of America, created to be the financing arm of the Alliance. The Fund coordinates the funding of Alliance activities from a variety of sources as well as undertakes various fiduciary responsibilities including asset management and investment, financial control, auditing and accounting.

The GAVI Fund Board shapes the Alliance financial strategy to support implementation of the GAVI Strategic Plan as developed by the GAVI Alliance Board. In this capacity, the Fund Board monitors GAVI income received from multiple sources, validates budgets, certifies availability of funding, and determines funding sources for programmes. In addition, the Board monitors investments and asset liabilities to ensure financing is available as needed. The Board also provides strategic guidance and support to the US based private fundraising work of the Alliance.

International Finance Facility for Immunisation (IFFIm)

The International Finance Facility for Immunisation is a multilateral development institution established as a charity with the Charity Commission for England and Wales. IFFIm has been designed to accelerate the availability of funds to be used for health and immunisation programmes through the GAVI Alliance by “frontloading” donors’ pledges through the sale of AAA-rated bonds.

The IFFIm Board is composed of independent directors with expertise in the areas of finance, investment, international law, global health and development. The Board oversees each bond issuance and develops funding, liquidity and other operating strategies to safeguard and maximise the value of IFFIm proceeds. The Board also reviews and approves requests for IFFIm funds to be used for Alliance programmes.
The GAVI Fund Affiliate

The GAVI Fund Affiliate was established to enter into pledge agreements with IFFIm donors and assign these pledges to the IFFIm Company for eventual programme disbursement. The GAVI Fund Affiliate is registered in England and Wales as a company limited by guarantee.

GAVI Fund Affiliate Board is comprised of experts in global health, investment, auditing and accounting. The Board reviews and approves programme funding requests, and makes subsequent requests for funding to the IFFIm.

The GAVI Foundation

The GAVI Foundation is a Swiss foundation registered in the Geneva Register of Commerce. The Foundation’s charitable mission involves providing support for GAVI Alliance programmes and the GAVI Secretariat in Geneva.

The GAVI Foundation Board ensures that the Foundation complies with Swiss law and maintains its charitable status.
GAVI governance membership

GAVI Alliance Board

Chair
Dr. Margaret Chan
Director-General
World Health Organization

Renewable members
Mrs. Daisy Mafubelu
Assistant Director General,
Family and Community Health
World Health Organization

Mr. Kul Gautam
Deputy Executive Director
UNICEF

Dr. Dan Kraushaar
Interim Director, Global Health Strategies
Bill & Melinda Gates Foundation

Ms. Joy Phumaphi
Vice President and Network Head,
Human Development
World Bank Group

Government - developing countries
Dr. Tatul Hakobyan
Deputy Minister of Health
Armenia

Prof. Eng Huot
Secretary of State for Health
Cambodia

Dr. Tedros Ghebreyesus
Minister of Health
Ethiopia

Major (Rtd.) Courage Emmanuel Kobla Quashigah
Minister of Health
Ghana

Government - donor countries
Ms. Brigitte Girardin
Minister Delegate for Cooperation,
Development and Francophonie
Ministry of Foreign Affairs
France

Mr. Rob de Vos
Deputy Director-General for International Cooperation
Ministry of Foreign Affairs
The Netherlands

Dr. Sigrun Mogedal
Ambassador for HIV/AIDS
Ministry of Foreign Affairs
Norway

Mr. Gavin McGillivray
Head, Global Funds & Development,
Finance Institutions Department
Department for International Development (DFID)
United Kingdom

Nongovernmental organisations (NGO)
Dr. Adenike Grange
President
International Pediatric Association

Industry - developing countries
Dr. Akira Homma
Director
Bio-Manguinhos/Fiocruz

Industry - OECD countries
Ms. Margie McGlynn
President
Merck Vaccines

Research and technical health institutes
Dr. John Clemens
Director-General
International Vaccine Institute
GAVI Fund Board

Mrs. Graça Machel (Chair)
President
Foundation for Community Development

Mr. Nelson Mandela (Chair Emeritus)
Former President of South Africa and
Founder of the Nelson Mandela Foundation

Her Majesty Queen Rania Al-Abdullah of Jordan

Mr. Wayne Berson
Partner and National Director of Not-for-Profit
Services
BDO Seidman, LLP

Mr. George Bickerstaff
Managing Director
CRT Capital Group LLC

Mr. Dwight L. Bush
President & CEO
Urban Trust Bank

Mr. Michel Camdessus
Honorary Governor
Bank of France

Ms. Jocelyn S. Davis
President
Nelson Hart L.L.C.

The Honourable Uffe Ellemann-Jensen
Former Minister for Foreign Affairs
Denmark

Mr. Ashutosh Garg
Founder and Chairman
Guardian Lifecare Pvt Ltd

Mr. Allan C. Golston
President, U.S. Program
Bill & Melinda Gates Foundation

Mr. Dagfinn Haybråten
Member of Parliament and Leader
of the Christian Democratic Party
Norway

Dr. Julian Lob-Levyt
Executive Secretary and CEO
The GAVI Alliance and Fund

Mrs. Mary Robinson
Former President of Ireland and
President of Realizing Rights:
The Ethical Globalization Initiative

Mr. Jean-Louis Sarbib
Former Senior Vice President,
Human Development Network
World Bank Group

Dr. Amartya Sen
Lamont University Professor
Harvard University

Dr. Rita Süssmuth
Former President of the Bundestag
Germany

Mr. George W. Wellde
Vice Chairman of Fixed Income,
Currency and Commodities
Goldman Sachs & Co.
IFFIm Board

Dr. Alan R. Gillespie, CBE (Chair)
Chairman
Ulster Bank Group

Ms. Arunma Oteh
Vice President, Corporate Services
African Development Bank Group

Mr. John Cummins
Group Treasurer
Standard Life Assurance Company

Dr. Dayanath Chandrajith Jayasuriya
Former Chairman
Securities and Exchange Commission of Sri Lanka

Ms. Michèle Boccoz
Director, International Affairs
Institut Pasteur

GAVI Fund Affiliate Board

Mr. Wayne Berson (Chair)
Partner and National Director of Not-for-Profit Services
BDO Seidman, LLP

Mr. Stephen Zinser
Chief Investment Officer
European Credit Management Limited

Mr. Bo Stenson
Former Deputy Executive Secretary
The GAVI Alliance

Dr. André Prost
Former Director of Government & Private Sector Relations
World Health Organization
GAVI Foundation Board

Dr. Louis Currat (Chair)
Former Executive Secretary
Global Forum for Health Research

Dr. Julian Lob-Levyt
Executive Secretary and CEO
The GAVI Alliance and Fund

Mr. Timothy E. Niander
General Counsel and Corporate Secretary
The GAVI Fund
annexes
Annex 1: use of International Finance Facility for Immunisation (IFFIm) funds
November–December 2006

New and under-used vaccines

<table>
<thead>
<tr>
<th>Country</th>
<th>Vaccine</th>
<th>Total (US$)</th>
<th>Number of Doses</th>
<th>Autodisable syringes</th>
<th>Reconstitution syringes</th>
<th>Safety boxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>DTP–HepB/Hib</td>
<td>2,809,632</td>
<td>750,200</td>
<td>766,500</td>
<td>416,300</td>
<td>13,150</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>DTP–HepB/Hib</td>
<td>3,993,428</td>
<td>1,092,600</td>
<td>–</td>
<td>606,300</td>
<td>–</td>
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<tr>
<td>Ghana</td>
<td>DTP–HepB/Hib</td>
<td>3,142,293</td>
<td>838,200</td>
<td>894,200</td>
<td>465,100</td>
<td>15,100</td>
</tr>
<tr>
<td>Kenya</td>
<td>DTP–HepB/Hib</td>
<td>8,372,747</td>
<td>2,247,600</td>
<td>1,870,600</td>
<td>1,039,600</td>
<td>32,325</td>
</tr>
<tr>
<td>Malawi</td>
<td>DTP–HepB/Hib</td>
<td>1,752,489</td>
<td>455,000</td>
<td>907,900</td>
<td>504,900</td>
<td>15,700</td>
</tr>
<tr>
<td>Mali</td>
<td>DTP–HepB/Hib</td>
<td>4,845,575</td>
<td>1,303,200</td>
<td>1,005,800</td>
<td>548,000</td>
<td>17,250</td>
</tr>
<tr>
<td>Mongolia</td>
<td>DTP–HepB/Hib</td>
<td>579,023</td>
<td>154,600</td>
<td>158,000</td>
<td>85,800</td>
<td>2,725</td>
</tr>
<tr>
<td>Zambia</td>
<td>DTP–HepB/Hib</td>
<td>2,692,652</td>
<td>703,800</td>
<td>1,232,500</td>
<td>697,500</td>
<td>21,425</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>DTP–HepB</td>
<td>2,927,411</td>
<td>2,446,000</td>
<td>2,275,200</td>
<td>–</td>
<td>25,275</td>
</tr>
<tr>
<td>Cambodia</td>
<td>DTP–HepB</td>
<td>47,461</td>
<td>–</td>
<td>578,800</td>
<td>–</td>
<td>6,425</td>
</tr>
<tr>
<td>Cameroon</td>
<td>DTP–HepB</td>
<td>709,618</td>
<td>512,000</td>
<td>1,917,200</td>
<td>–</td>
<td>21,300</td>
</tr>
<tr>
<td>Congo</td>
<td>DTP–HepB</td>
<td>405,073</td>
<td>361,500</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Democratic Republic of the Congo</td>
<td>DTP–HepB</td>
<td>6,943,461</td>
<td>5,838,000</td>
<td>4,899,700</td>
<td>–</td>
<td>54,400</td>
</tr>
<tr>
<td>Madagascar</td>
<td>DTP–HepB</td>
<td>575,847</td>
<td>450,500</td>
<td>759,600</td>
<td>–</td>
<td>16,875</td>
</tr>
<tr>
<td>Pakistan</td>
<td>DTP–HepB</td>
<td>850,131</td>
<td>–</td>
<td>10,367,300</td>
<td>–</td>
<td>115,100</td>
</tr>
<tr>
<td>United Republic of Tanzania</td>
<td>DTP–HepB</td>
<td>1,121,680</td>
<td>929,000</td>
<td>984,200</td>
<td>–</td>
<td>10,925</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>HepB</td>
<td>60,679</td>
<td>193,800</td>
<td>161,700</td>
<td>–</td>
<td>1,800</td>
</tr>
<tr>
<td>Guinea</td>
<td>HepB</td>
<td>438,697</td>
<td>1,368,600</td>
<td>1,266,400</td>
<td>–</td>
<td>14,075</td>
</tr>
<tr>
<td>India</td>
<td>HepB</td>
<td>3,179,394</td>
<td>12,995,400</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>HepB</td>
<td>253,793</td>
<td>789,600</td>
<td>738,900</td>
<td>–</td>
<td>8,225</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>HepB</td>
<td>25,810</td>
<td>65,000</td>
<td>68,800</td>
<td>–</td>
<td>775</td>
</tr>
<tr>
<td>Lao People's Democratic Republic</td>
<td>HepB</td>
<td>9,850</td>
<td>29,500</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Benin</td>
<td>YF</td>
<td>226,091</td>
<td>270,700</td>
<td>74,500</td>
<td>30,100</td>
<td>1,175</td>
</tr>
<tr>
<td>Cameroon</td>
<td>YF</td>
<td>34,963</td>
<td>–</td>
<td>457,600</td>
<td>55,300</td>
<td>5,700</td>
</tr>
<tr>
<td>Central African Republic</td>
<td>YF</td>
<td>38,985</td>
<td>40,100</td>
<td>74,700</td>
<td>8,900</td>
<td>950</td>
</tr>
<tr>
<td>Chad</td>
<td>YF</td>
<td>95,947</td>
<td>119,000</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Congo</td>
<td>YF</td>
<td>38,943</td>
<td>48,300</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Democratic Republic of the Congo</td>
<td>YF</td>
<td>815,628</td>
<td>834,500</td>
<td>1,484,800</td>
<td>370,500</td>
<td>20,600</td>
</tr>
<tr>
<td>Ghana</td>
<td>YF</td>
<td>303,829</td>
<td>340,900</td>
<td>300,600</td>
<td>75,700</td>
<td>4,200</td>
</tr>
<tr>
<td>Guinea</td>
<td>YF</td>
<td>190,957</td>
<td>215,600</td>
<td>175,400</td>
<td>47,900</td>
<td>2,500</td>
</tr>
<tr>
<td>Mali</td>
<td>YF</td>
<td>97,063</td>
<td>117,500</td>
<td>14,400</td>
<td>19,800</td>
<td>400</td>
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</tbody>
</table>

Subtotal (US$): 47,579,149

Source: 36
## Injection safety support

<table>
<thead>
<tr>
<th>Country</th>
<th>Total (US$)</th>
<th>Number of BCG syringes</th>
<th>Autodisable syringes</th>
<th>Reconstitution syringes</th>
<th>Safety boxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>131,396</td>
<td>439,900</td>
<td>1,041,200</td>
<td>103,700</td>
<td>17,600</td>
</tr>
<tr>
<td>Madagascar</td>
<td>53,733</td>
<td>411,100</td>
<td>292,400</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Malawi</td>
<td>115,558</td>
<td>393,800</td>
<td>885,500</td>
<td>129,800</td>
<td>15,650</td>
</tr>
<tr>
<td>Mongolia</td>
<td>26,893</td>
<td>52,300</td>
<td>260,400</td>
<td>13,500</td>
<td>3,625</td>
</tr>
<tr>
<td><strong>Subtotal:</strong></td>
<td><strong>327,580</strong></td>
<td><strong>1,297,100</strong></td>
<td><strong>2,479,500</strong></td>
<td><strong>247,000</strong></td>
<td><strong>36,875</strong></td>
</tr>
</tbody>
</table>

Total value of requested funds for release (US$): 47,906,729
### Annex 2: cumulative approved support to countries, 2000–2006 (US$)

<table>
<thead>
<tr>
<th>Country</th>
<th>Injection safety</th>
<th>Immunisation services</th>
<th>New &amp; underused vaccines support</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Afghanistan</td>
<td>1,676,500</td>
<td>10,497,300</td>
<td>3,264,500</td>
<td>15,438,300</td>
</tr>
<tr>
<td>2 Albania</td>
<td>101,000</td>
<td>100,000</td>
<td>401,000</td>
<td>602,000</td>
</tr>
<tr>
<td>3 Angola</td>
<td>1,476,000</td>
<td>3,088,000</td>
<td>10,000,500</td>
<td>14,564,500</td>
</tr>
<tr>
<td>4 Armenia</td>
<td>57,000</td>
<td>179,860</td>
<td>357,000</td>
<td>593,860</td>
</tr>
<tr>
<td>5 Azerbaijan</td>
<td>138,500</td>
<td>619,880</td>
<td>885,000</td>
<td>1,643,380</td>
</tr>
<tr>
<td>6 Bangladesh</td>
<td>8,117,000</td>
<td>21,998,700</td>
<td>13,878,500</td>
<td>43,994,200</td>
</tr>
<tr>
<td>7 Benin</td>
<td>287,500</td>
<td>100,000</td>
<td>10,829,200</td>
<td>11,216,700</td>
</tr>
<tr>
<td>8 Bhutan</td>
<td>25,500</td>
<td>100,000</td>
<td>370,892</td>
<td>496,392</td>
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<tr>
<td>9 Bolivia</td>
<td>601,500</td>
<td>–</td>
<td>–</td>
<td>601,500</td>
</tr>
<tr>
<td>10 Bosnia &amp; Herzegovina</td>
<td>21,500</td>
<td>100,000</td>
<td>209,064</td>
<td>330,564</td>
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<tr>
<td>11 Burkina Faso</td>
<td>947,400</td>
<td>4,551,640</td>
<td>9,085,000</td>
<td>14,584,040</td>
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<tr>
<td>12 Burundi</td>
<td>420,000</td>
<td>750,000</td>
<td>13,778,000</td>
<td>14,948,000</td>
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<tr>
<td>13 Cambodia</td>
<td>688,100</td>
<td>1,437,200</td>
<td>6,226,000</td>
<td>8,351,300</td>
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<tr>
<td>14 Cameroon</td>
<td>1,029,300</td>
<td>5,590,120</td>
<td>9,634,185</td>
<td>16,253,605</td>
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<tr>
<td>15 Central African Republic</td>
<td>140,900</td>
<td>680,860</td>
<td>406,700</td>
<td>1,228,460</td>
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<tr>
<td>16 Chad</td>
<td>413,500</td>
<td>1,453,000</td>
<td>629,500</td>
<td>2,496,000</td>
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<tr>
<td>17 China</td>
<td>15,925,729</td>
<td>800,000</td>
<td>21,953,235</td>
<td>38,678,964</td>
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<tr>
<td>18 Comoros</td>
<td>33,000</td>
<td>600,000</td>
<td>250,300</td>
<td>443,300</td>
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<tr>
<td>19 Democratic Republic of the Congo</td>
<td>3,258,400</td>
<td>19,438,780</td>
<td>9,182,000</td>
<td>31,879,180</td>
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<tr>
<td>20 Congo</td>
<td>263,500</td>
<td>759,500</td>
<td>431,000</td>
<td>1,454,000</td>
</tr>
<tr>
<td>21 Côte d'Ivoire</td>
<td>–</td>
<td>2,418,500</td>
<td>6,027,000</td>
<td>13,045,500</td>
</tr>
<tr>
<td>22 Cuba</td>
<td>170,500</td>
<td>–</td>
<td>–</td>
<td>170,500</td>
</tr>
<tr>
<td>23 Djibouti</td>
<td>33,900</td>
<td>112,800</td>
<td>–</td>
<td>146,700</td>
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<tr>
<td>24 Eritrea</td>
<td>144,500</td>
<td>529,040</td>
<td>2,074,000</td>
<td>2,747,540</td>
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<tr>
<td>25 Ethiopia</td>
<td>3,287,800</td>
<td>13,369,320</td>
<td>34,728,500</td>
<td>51,385,620</td>
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<tr>
<td>26 Gambia</td>
<td>126,500</td>
<td>466,300</td>
<td>3,604,900</td>
<td>4,197,700</td>
</tr>
<tr>
<td>27 Georgia</td>
<td>65,600</td>
<td>209,500</td>
<td>617,400</td>
<td>892,500</td>
</tr>
<tr>
<td>28 Ghana</td>
<td>855,300</td>
<td>3,421,300</td>
<td>37,019,500</td>
<td>41,296,100</td>
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<tr>
<td>29 Guinea</td>
<td>650,500</td>
<td>2,620,400</td>
<td>1,032,000</td>
<td>4,302,900</td>
</tr>
<tr>
<td>30 Guinea-Bissau</td>
<td>81,000</td>
<td>331,860</td>
<td>–</td>
<td>412,860</td>
</tr>
<tr>
<td>31 Guyana</td>
<td>–</td>
<td>100,000</td>
<td>944,600</td>
<td>1,044,600</td>
</tr>
<tr>
<td>32 Haiti</td>
<td>397,500</td>
<td>1,256,000</td>
<td>–</td>
<td>1,653,500</td>
</tr>
<tr>
<td>33 Honduras</td>
<td>457,000</td>
<td>–</td>
<td>–</td>
<td>457,000</td>
</tr>
<tr>
<td>34 India</td>
<td>17,000,000</td>
<td>1,200,000</td>
<td>15,716,500</td>
<td>33,916,500</td>
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<tr>
<td>35 Indonesia</td>
<td>11,227,000</td>
<td>9,736,000</td>
<td>13,037,000</td>
<td>34,000,000</td>
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<tr>
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<td>5,140,214</td>
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</table>

Source: 37
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<thead>
<tr>
<th>Country</th>
<th>Injection safety</th>
<th>Immunisation services</th>
<th>New &amp; underused vaccines support</th>
<th>Grand Total</th>
</tr>
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<tbody>
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<td><strong>Lesotho</strong></td>
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<td>249,600</td>
<td>228,700</td>
<td>588,800</td>
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<tr>
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<td>100,000</td>
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<td><strong>Mongolia</strong></td>
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<td>753,500</td>
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<td>-</td>
<td>331,500</td>
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<td>-</td>
<td>317,000</td>
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<tr>
<td><strong>Rwanda</strong></td>
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<td>2,829,700</td>
<td>19,181,500</td>
<td>22,380,700</td>
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<tr>
<td><strong>Sao Tome &amp; Principe</strong></td>
<td>21,002</td>
<td>160,000</td>
<td>63,800</td>
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<tr>
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<tr>
<td><strong>Sierra Leone</strong></td>
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<td><strong>Somalia</strong></td>
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<td><strong>Togo</strong></td>
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<tr>
<td><strong>Turkmenistan</strong></td>
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<tr>
<td><strong>Uganda</strong></td>
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<td><strong>Ukraine</strong></td>
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<td><strong>Uzbekistan</strong></td>
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<td><strong>Yemen</strong></td>
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<td><strong>Zimbabwe</strong></td>
<td>1,080,000</td>
<td>1,274,000</td>
<td>-</td>
<td>2,354,000</td>
</tr>
</tbody>
</table>

**Grand total (US$)**

<table>
<thead>
<tr>
<th>Injection safety</th>
<th>Immunisation services</th>
<th>New &amp; underused vaccines support</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>106,464,531</td>
<td>218,423,980</td>
<td>637,289,282</td>
<td>962,177,793</td>
</tr>
</tbody>
</table>
Annex 3: sources and references

5. WHO/UNICEF database, updated December 2006 (data reported by countries).

8. World Development Indicators 2006 database (World Bank).

12. Goldman Sachs International

13. Data from UNICEF Supply Division, Copenhagen, Denmark, 2007.


25. Data provided by country through World Health Organization and UNICEF Joint Reporting Form and WHO Regional offices. 2006 data is provisional.


30. UNICEF Supply Division, Copenhagen, Denmark, 2007.
31. UNICEF Supply Division, Copenhagen, Denmark, 2007.

35. UNICEF Supply Division, Copenhagen, Denmark, 2007.

36. Data from UNICEF Supply Division, Copenhagen, Denmark, 2007.
Annex 4: photo credits and captions

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NOTE
The 2006 GAVI audited, consolidated accounts will be available on the GAVI website on or before September 30, 2007:

www.gavialliance.org