

# Global Report to SAGE

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## Fulfillment of previous recommendations & progress highlights

SAGE Meeting, 8-10 November 2012

J.M. Okwo-Bele, WHO



World Health  
Organization

# Outline

- 1 Global progress**
- 2 Regional updates- RTAGs recommendations**
- 3 SAGE processes and future agenda items**
- 4 WHO reorganization**

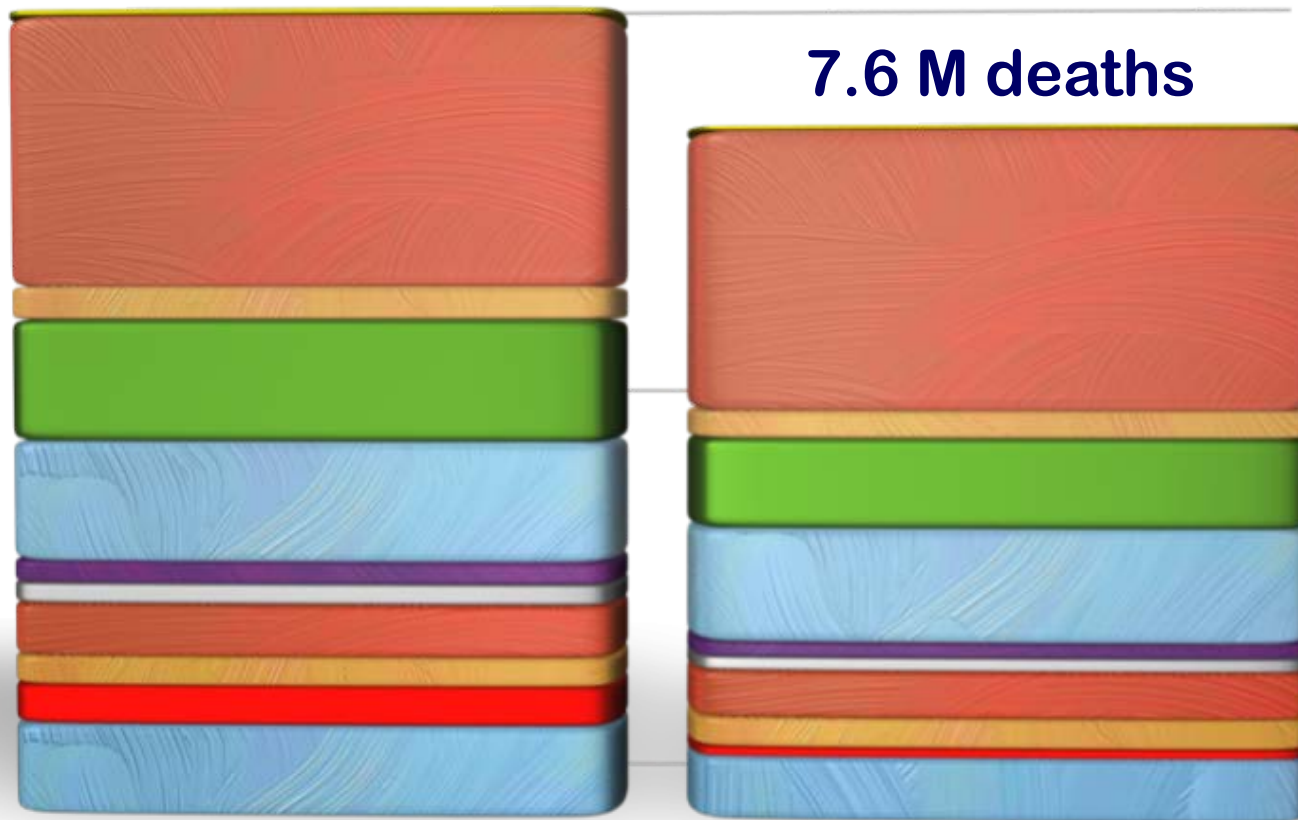


# Global progress

# Major causes of mortality in children under 5 years of age

9.6 M deaths

7.6 M deaths



2000

2010



6.9 million deaths Pneumonia : 18%  
Preterm complications : 14%  
Diarrhoea : 11%  
Intrapartum related complications : 9%  
Malaria : 7%

2011

Source: Li, Liu, et al "Global, Regional, and National Causes of Child Mortality: An updated systematic analysis for 2010 with time trends" The Lancet 379, no. 9832 (June 9, 2012)

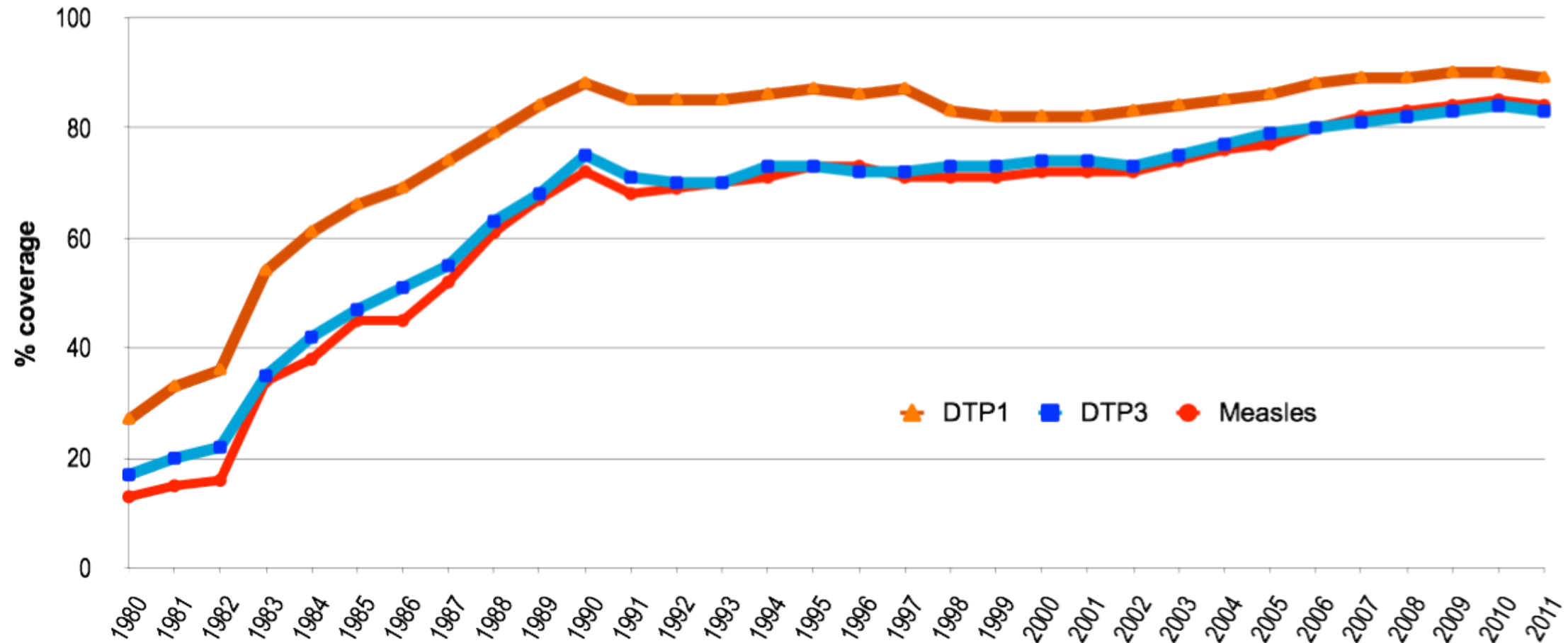
6-8 November 2012 SAGE Meeting



World Health Organization

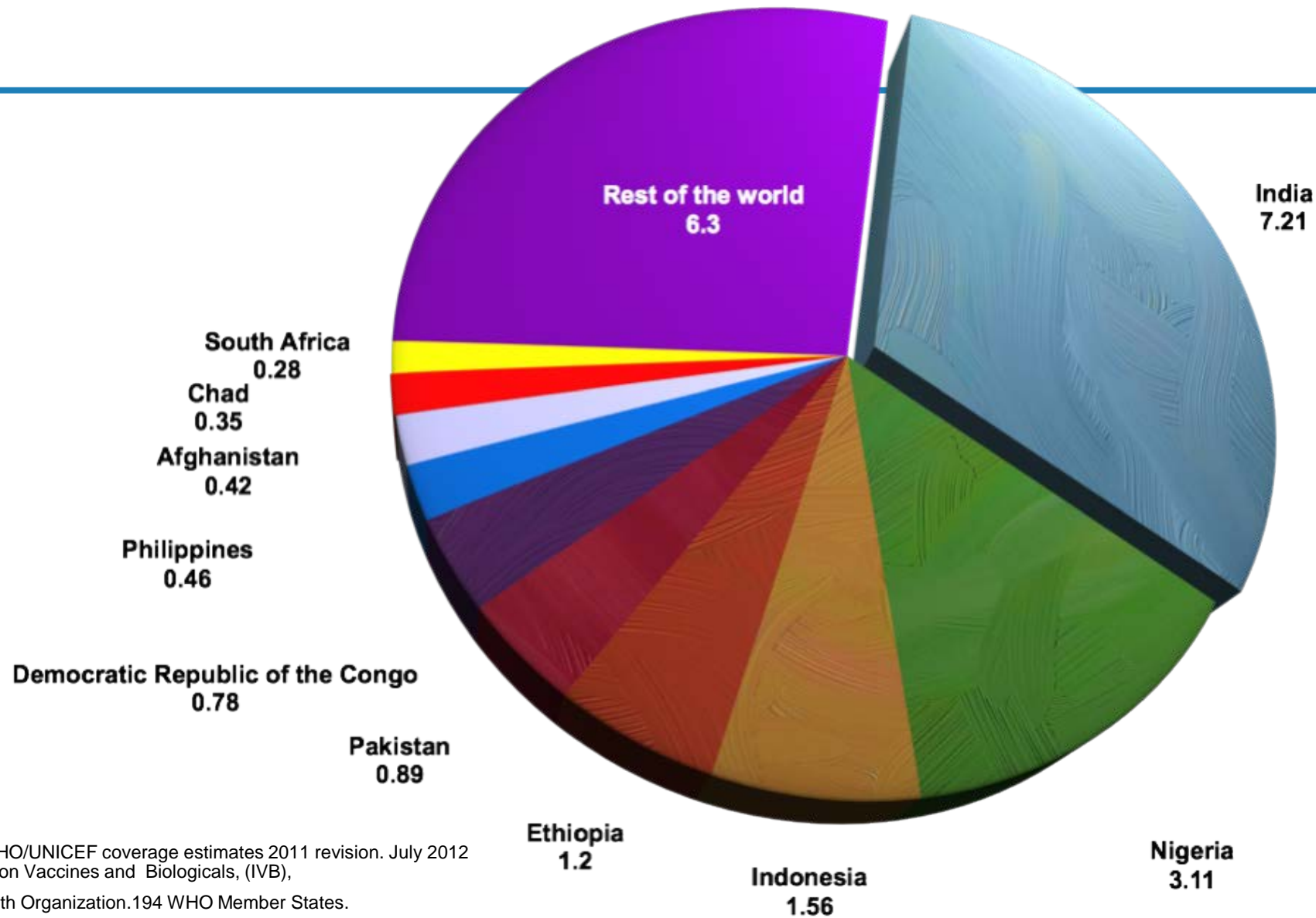
# Global coverage estimates, 1980-2011

## DTP1, DTP3 and measles vaccine



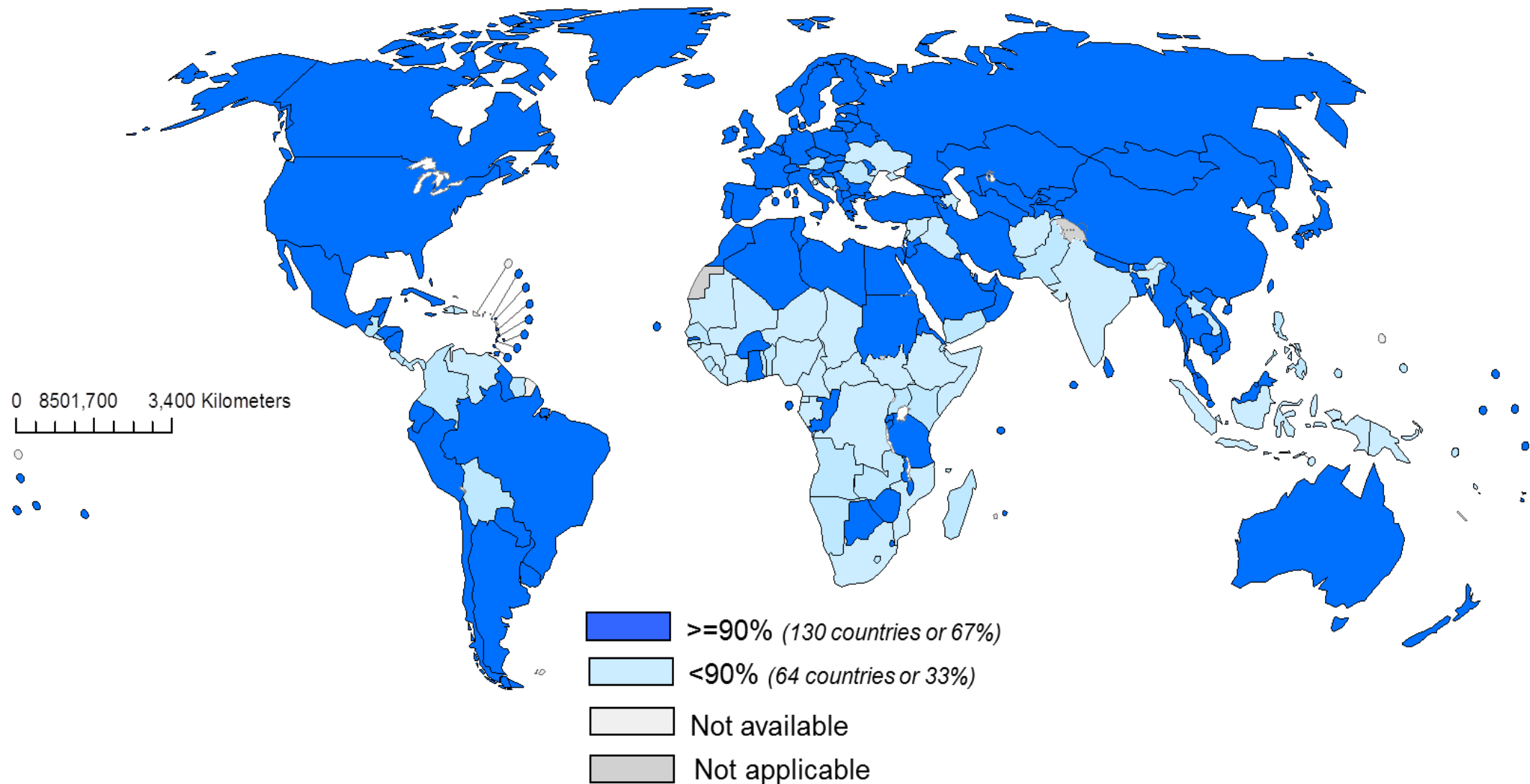
Source: WHO/UNICEF coverage estimates 2011 revision. July 2012  
194 WHO Member States.

# 22.4 million infants did not receive DTP3, 2011



Source: WHO/UNICEF coverage estimates 2011 revision. July 2012  
Immunization Vaccines and Biologicals, (IVB),  
World Health Organization. 194 WHO Member States.

# Countries according to infant immunization coverage with 3 doses of DTP containing vaccines, 2011



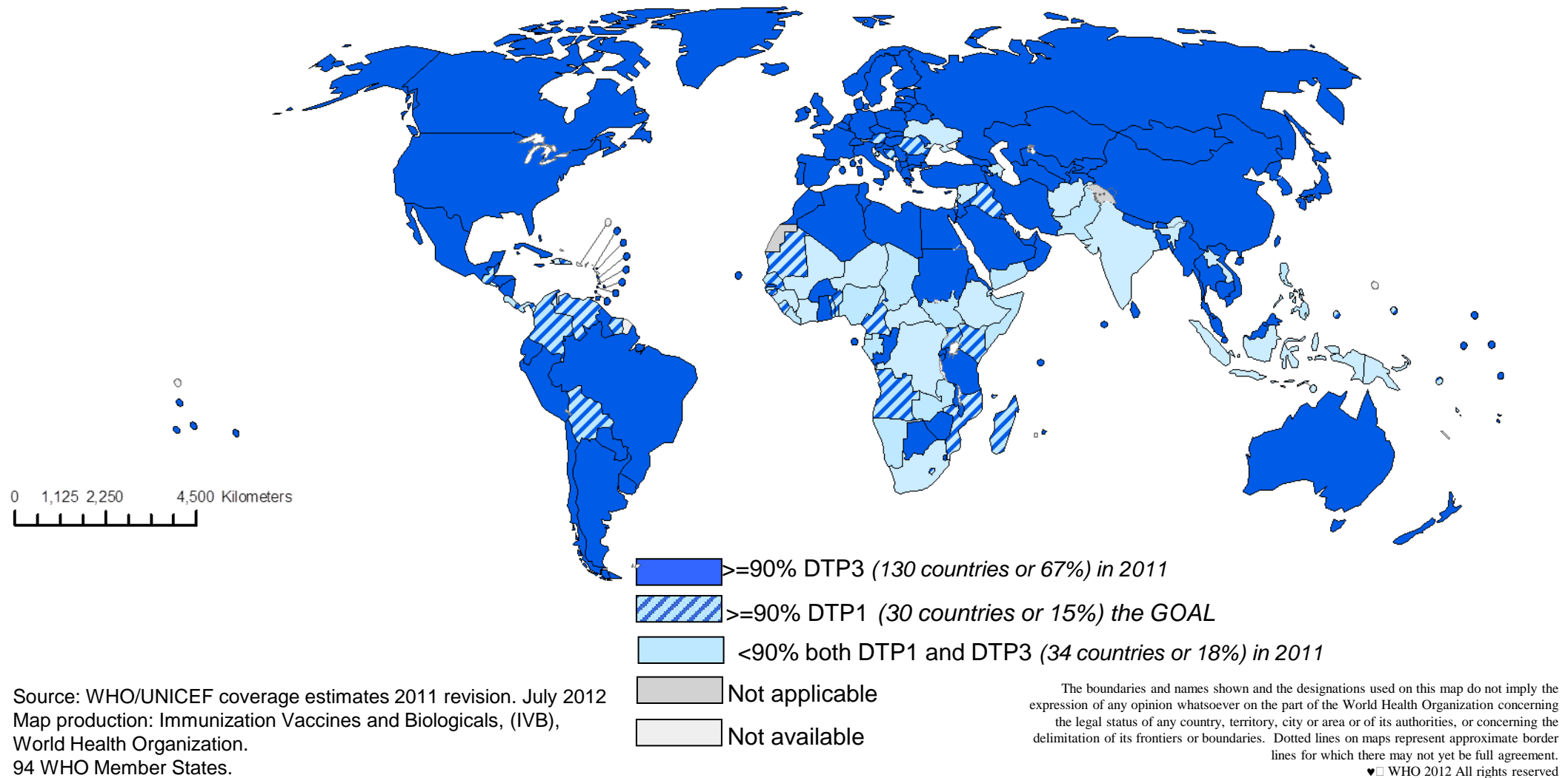
Source: WHO/UNICEF coverage estimates 2011 revision. July 2012  
Map production: Immunization Vaccines and Biologicals, (IVB),  
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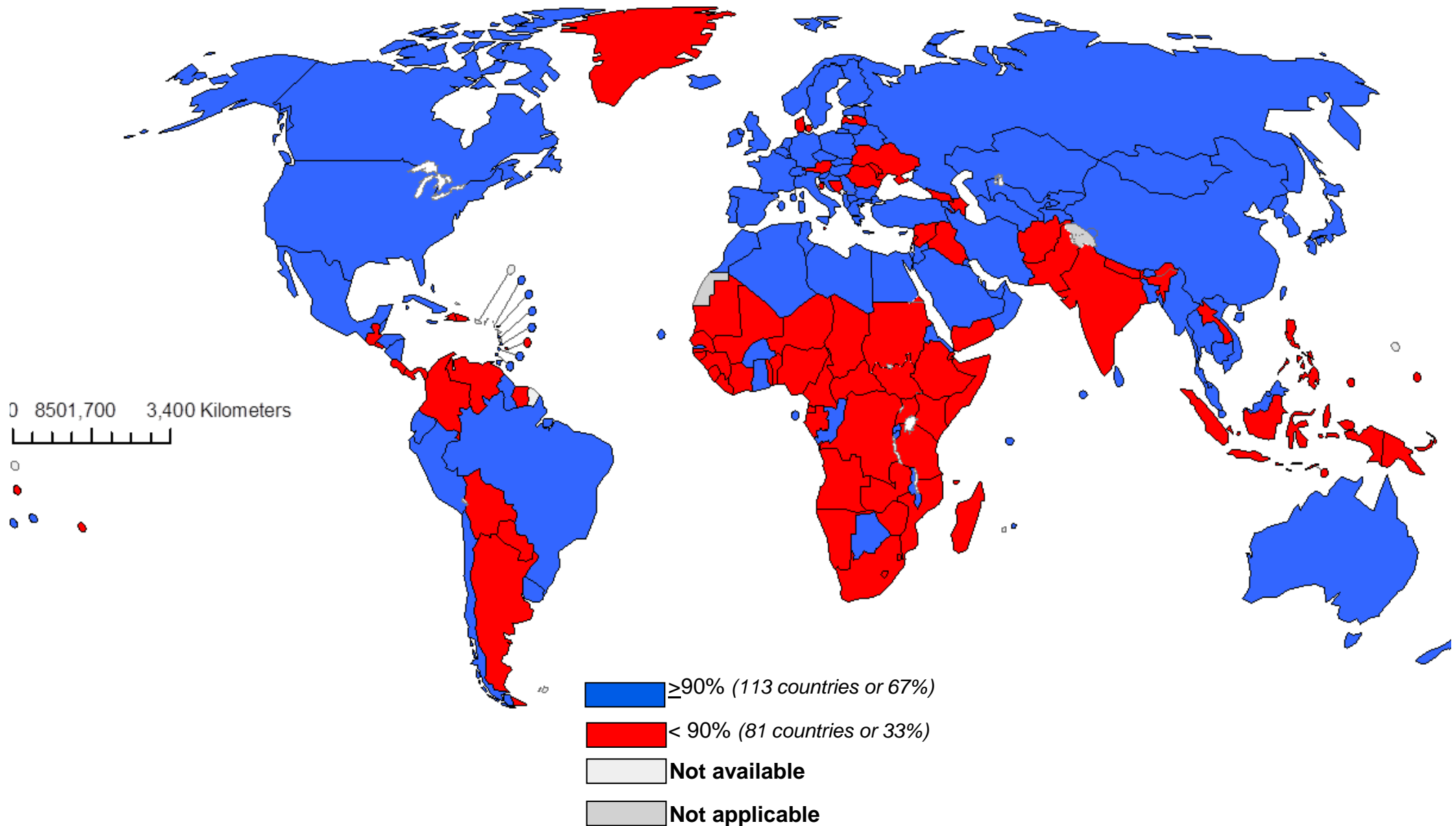
# LOOKING AHEAD

## How will the global map will look like if all children that initiate DTP1 also receive DTP3?





# Countries sustaining $\geq 90\%$ DTP3 coverage in infants, 2009-2011

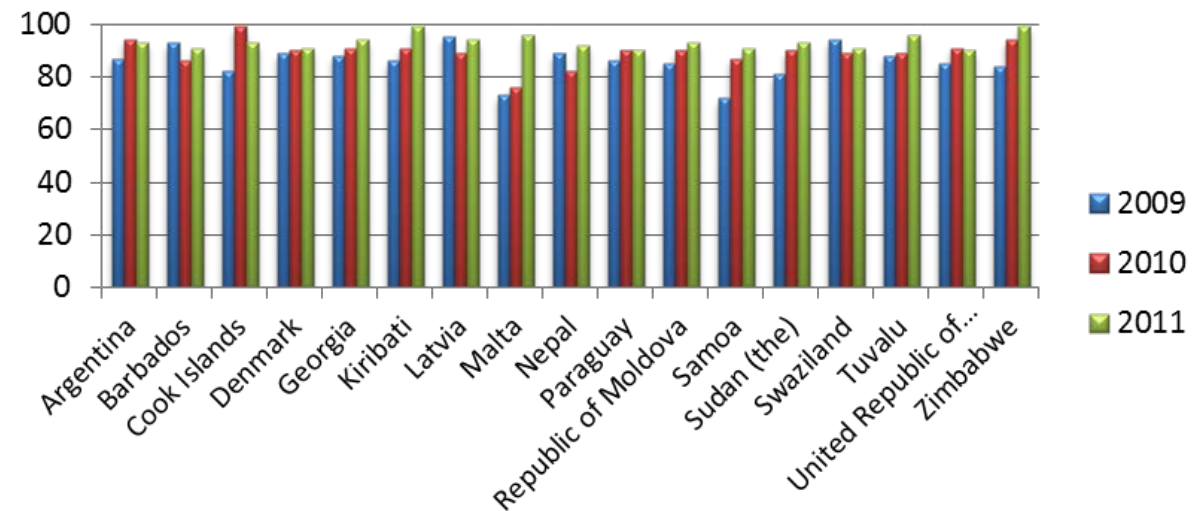


Source: WHO/UNICEF coverage estimates 2011 revision. July 2012  
Map production: Immunization Vaccines and Biologicals, (IVB),  
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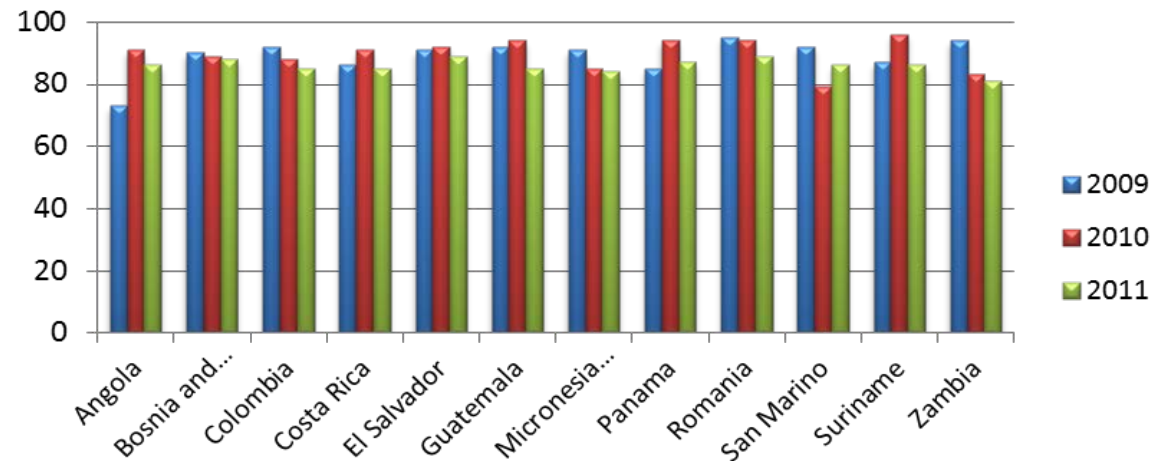
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# 81 countries which have not sustained $\geq 90\%$ DTP3 coverage (2009-2011)

**17** countries are on track and reached 90% coverage in 2011 or 2010



**12** Countries dropped below 90% coverage in 2011



**52** remain below 90% coverage for the last 3 years.

# Reaching the 90/80 goal ... a daunting task...?

"Back to the basics"



**Routine  
immunization  
back to the centre  
stage**

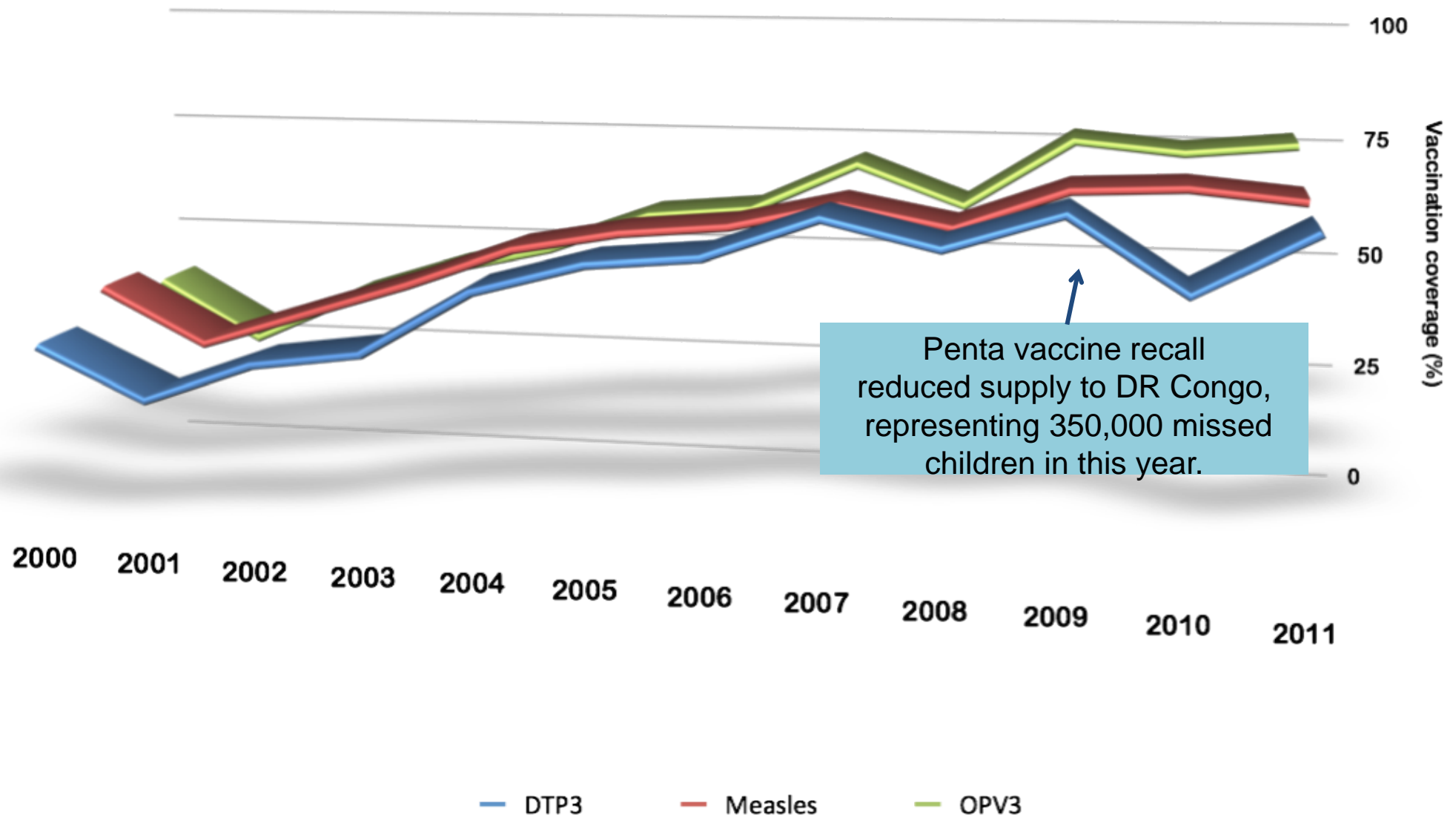
# Reaching the 90/80 goal ... a daunting task...?

## "Back to the basics"

Some of the key elements:

1. Adequate Vaccine Supply
2. Effective Operational strategies
3. Robust Data quality
4. Good Governance

# DR Congo vaccination coverage, 2000 - 2011 (based on WHO/UNICEF estimates)



# Adequate vaccine supply

## DTwP and DTP based combinations

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**DTwP**

**3 suppliers**

others using antigen capacity  
to formulate pentavalent  
vaccine

**DTwP-HepB-Hib**

**7 suppliers**

considerable expertise required,  
multiple problems leading to  
suspension or delays in supply

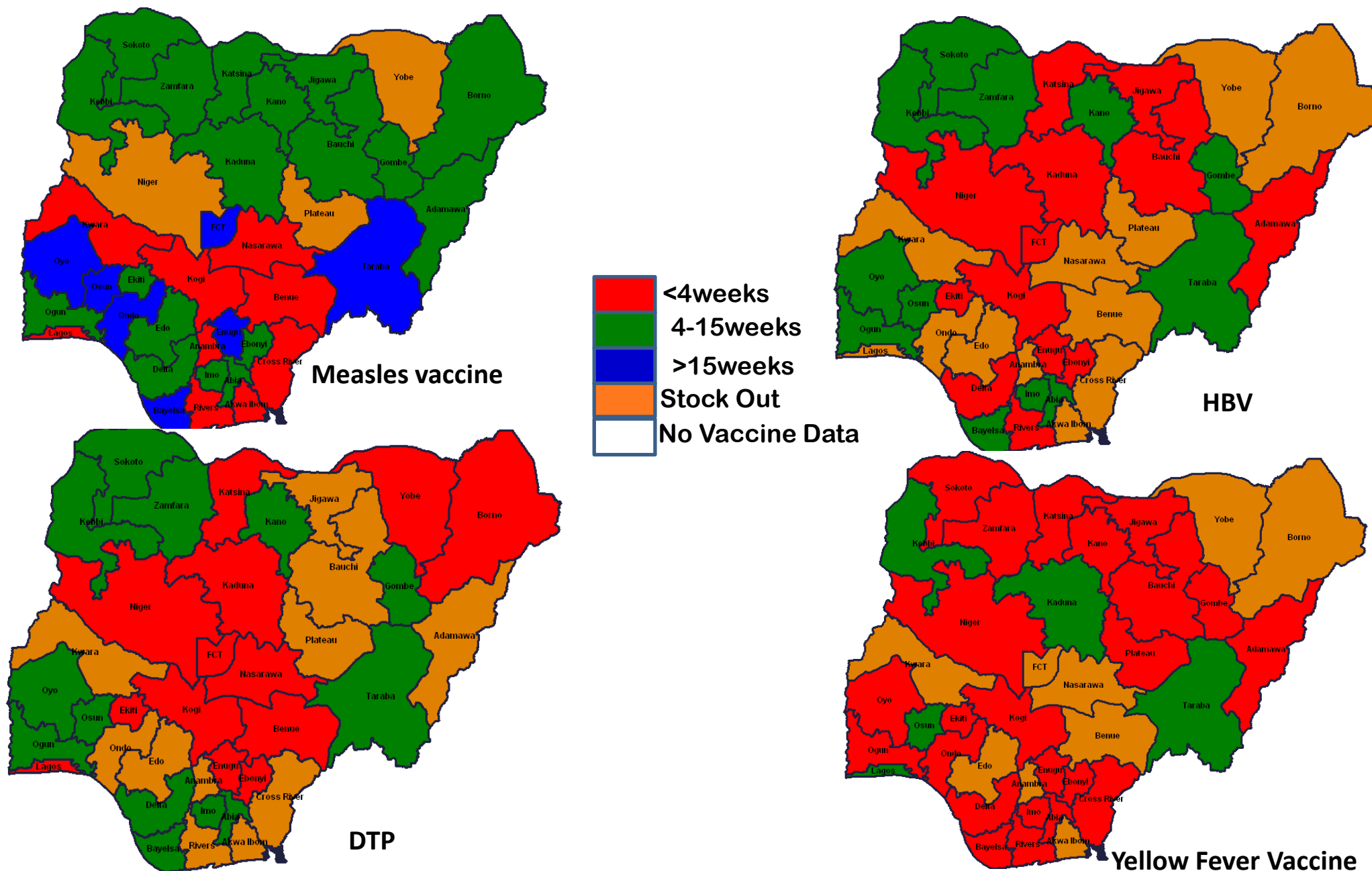
# Adequate vaccine supply

- effective collaboration
  - between “all key stakeholders”
  - to anticipate problems and
  - resolve emerging issues
- 
- Understanding of supply demand and capacity and risks
  - Collaboration with NRAs to assist in resolution of problems
  - Monitoring of pre-qualified vaccines
  - Careful planning and financing strategies
  - Assessment of vaccine management in the field

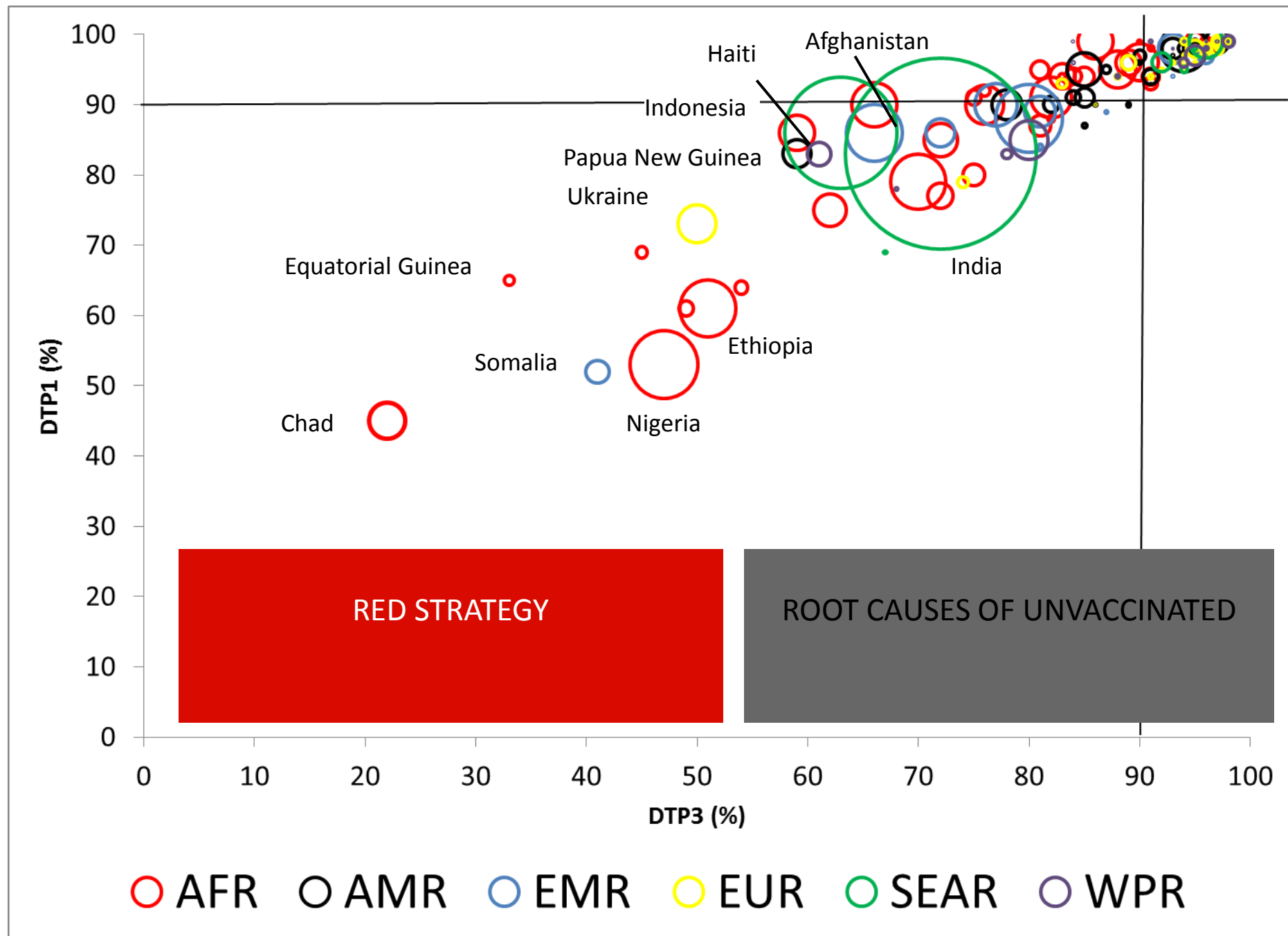


# Nigeria Vaccine Stock Levels at State Level April 2012

## (Monthly state stocks reports)



**Immunization coverage with one and three doses of DTP containing vaccine  
(and estimated number of children who started but not completed immunization):  
WHO and UNICEF estimates**



# Improving immunization coverage data quality and use

- ISSUES
- Poor recording and reporting
- Lack of accurate estimates of target population
- Inconsistent coverage results from various surveys
- Lack of capacity to analyze and use data to improve performance

# Improving immunization coverage data quality and use

## SOLUTIONS BEING PURSUED

Revitalize home-based records

Improve systems for recording and reporting of data (e.g. information communication technologies -ICTs-)

Standardize methods for periodic coverage surveys, including serosurveys

Support countries to improve estimates for target populations

Develop and scale up use of local level data



# Improve Governance - Back to the basics

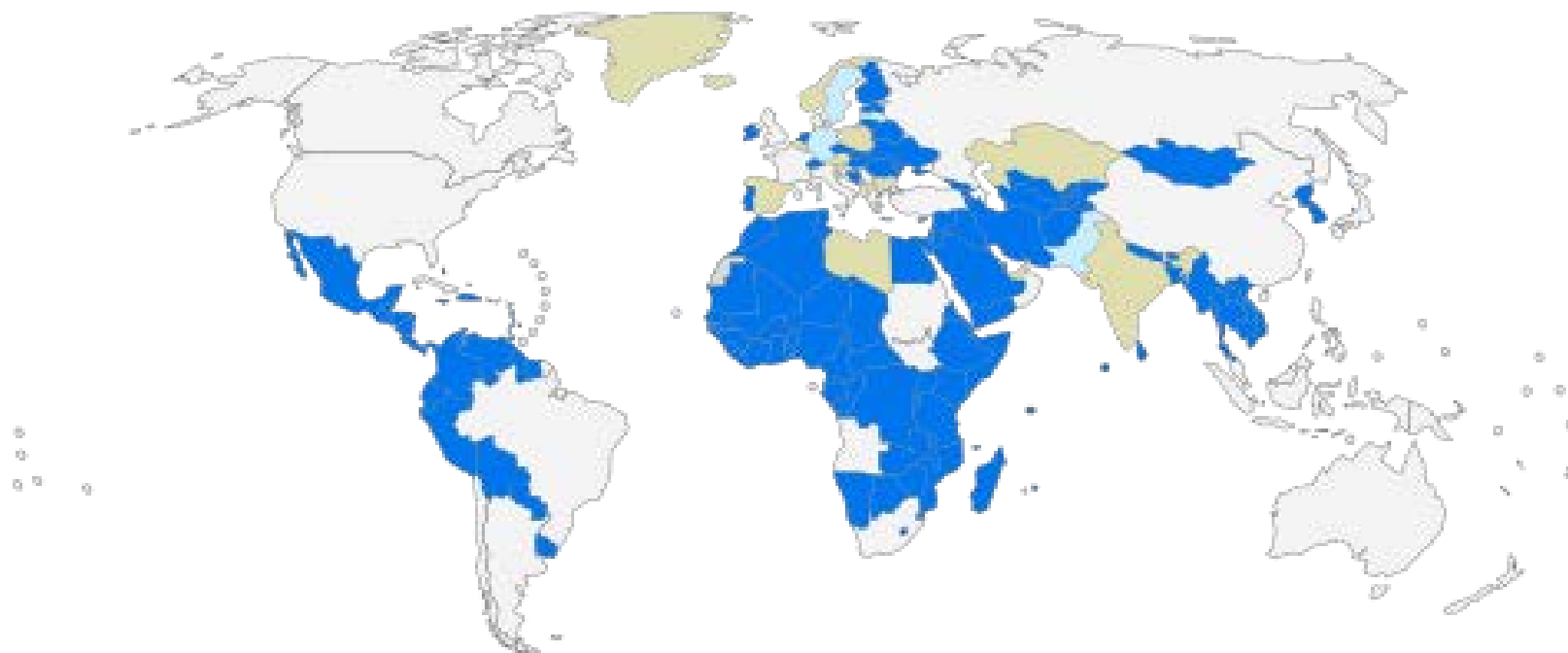


Comprehensive work-  
plan & evaluation

Target support to poor  
performing districts

Develop functional  
ICCs & NITAGs

# Countries with a national annual work plan for immunization services, 2011



- Yes (163 countries or 84%)
- No (5 countries or 3%)
- No data (26 countries or 13%)
- Not available
- Not applicable

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Source: WHO/UNICEF coverage estimates 2011 revision. July 2012  
Map production: Immunization Vaccines and Biologicals, (IVB),  
World Health Organization. 194 WHO Member States.  
Date of slide: 4 September 2012.

# Transforming plans of action into a management tool for action.....

## “hands on” weekly monitoring by AFRO of activities agreed by national EPI

ETHIOPIA

Road Map for Maintaining Polio-free Status, Sept-Dec 2012

Planned  
Fully Implemented  
Partially Implemented  
Not Implemented

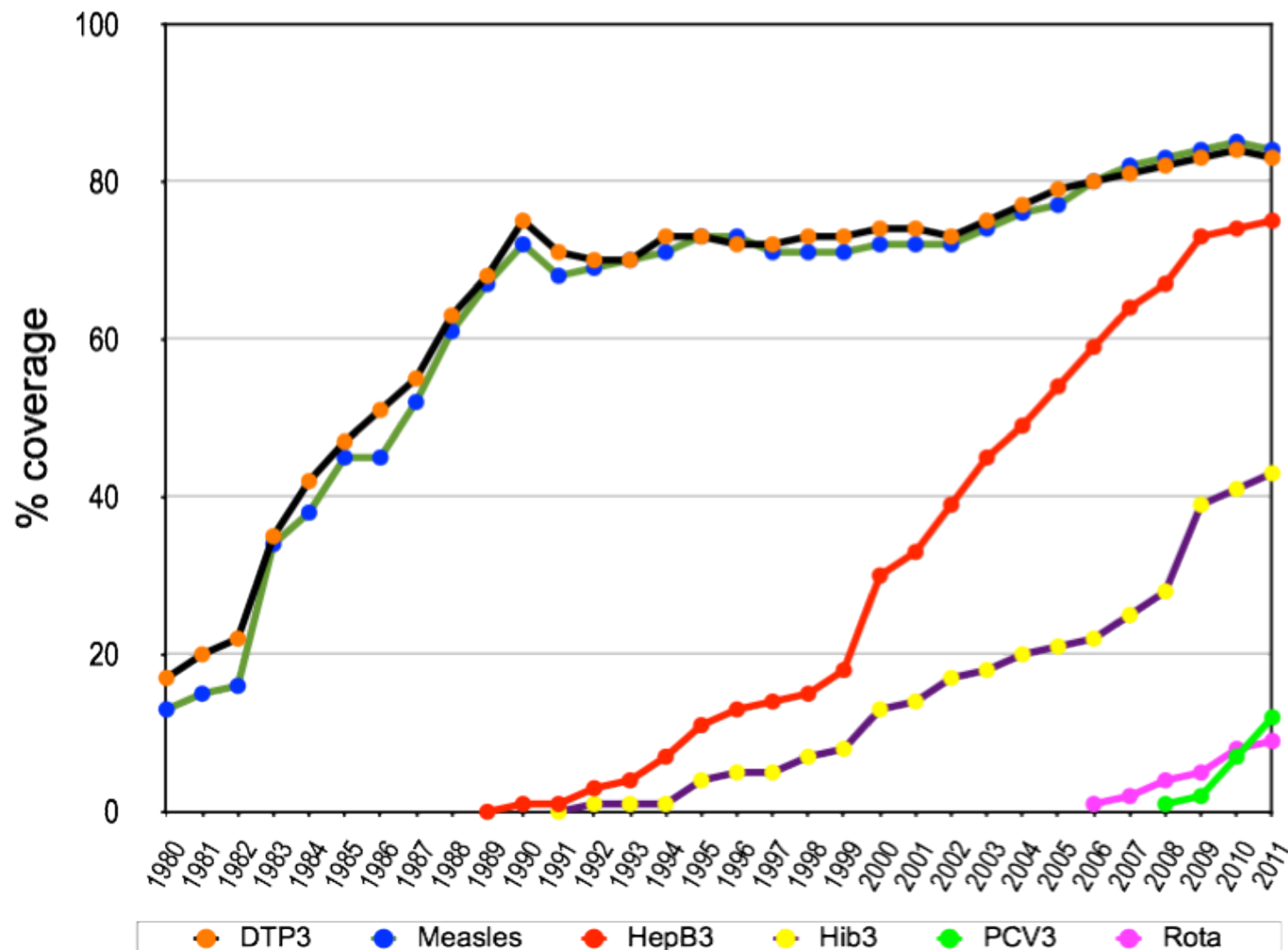
Objective	Activities	Responsible Organization	Status	April				May				June				July																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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Priority Area: Maintaining Polio-free Status																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Achieve and maintain standard surveillance performance indicators in all regions	Conduct risk assessment for polio surveillance, timely and sustainable surveillance	WHO	Quarterly risk assessments done																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Monitor the prioritization of facilities for polio surveillance	WHO, WHO	Monthly activity report available from field staff																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Support the training/refresher training of focal persons in surveillance with focus on high risk and poorly performing areas (Gondar, Bafra, Gambella, Amhara)	WHO, WHO	4 poorly performing regions supported																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Conduct regular surveillance supervision from the center focusing on poorly performing regions (e.g. Gondar and Amhara)	WHO	Poorly performing regions supported																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Extend deployment of short-term staff (including operational EPI team) to high risk / poorly performing areas in Gondar, Gambella, Tigray and Bafra to support after surveillance activities	WHO	4 risk regions supported with 4 short-term staff																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Support the production and distribution of surveillance materials for field and community members in local languages (Gondar)	WHO, WHO	Surveillance posters printed and distributed																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Support printing and distribution of updated AFP surveillance guideline	WHO	Updated AFP surveillance guideline printed and distributed in all regions																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Support the functioning of the national polio committee (NPPC, NPPC, NPPC)	WHO	Regular reports from the national polio committee																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Review final status of surveillance system report and develop action plan to address the recommendations	WHO, WHO, WHO	Action plan developed																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Monitor cross border coordination activities to strengthen surveillance along the border with neighboring countries	WHO, WHO, WHO	Monthly updates available																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Priority Area: Implementing surveillance activities in local population immunity																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Implement supplementary activities for local population immunity	Facilitate preparations for polio risk in high risk areas through re-surveying, vaccination, advice and surveillance	WHO, WHO, UNICEF, Amhara, Core Group	22 high risk areas supported																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Support implementation and supervision of 2 months of polio risk in 22 high risk areas	WHO, WHO, UNICEF, Amhara, Core Group	24 million under-five children vaccinated with 2 doses of OPV (OPV and OPV)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Conduct surveillance monitoring and supervision and performance review of surveillance system	WHO	24 million under-five children vaccinated																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Facilitate polio surveillance of data with high coverage / low coverage	WHO	Supervision planning and implementation of data																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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Monitoring, analysis and feedback on routine EPI performance	Complete and analyze monthly / quarterly surveillance performance data to identify priority problems	WHO, WHO	Monthly feedback reports to regions																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Conduct final analysis and report on problems in the field and high risk areas and high coverage / low coverage, identifying areas for improvement	WHO, WHO	Final reports available																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Finalize EPI Coverage Strategy and analysis and report	WHO, WHO, UNICEF	Coverage strategy report available																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
To allocate the responsibilities of routine surveillance of national level regional level including funding for activities	Advocate for regular EPI meetings at national level	WHO, WHO	Monthly EPI meetings conducted																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Support national EPI of Trade Forum for EPI	WHO, WHO	Regular national trade forum meetings																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Coordinate and conduct EPI meetings for high risk areas and low coverage areas for EPI	WHO	Further coordination and monitoring available																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
To review performance and provide support with high coverage of vaccination in high risk areas	Identify and provide support with the high coverage of vaccination in high risk areas (Gondar, Amhara)	WHO, WHO, UNICEF	High coverage areas identified																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Advocate with the EPI of EPI and EPI for improvement in vaccination	WHO, WHO, UNICEF	Advocacy visits conducted																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Support activities to increase vaccination coverage in high risk areas (Gondar, Amhara) through training and resources	WHO, WHO, UNICEF	27 areas supported																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Conduct supportive supervision to increase vaccination coverage																WHO, WHO	Poorly performing areas																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					



# **New vaccines as catalysts to strengthen routine immunization**

# Global coverage estimates, 1980-2011

## DTP3, Measles, HepB3, Hib3, PCV3 and Rota



% of live births	% of countries	
100	100	<b>DTP, MCV</b>
98	93	<b>HepB</b>
52	90	<b>Hib</b>
23	37	<b>PCV</b>
13	14	<b>Rota</b>

Source: WHO/UNICEF coverage estimates 2011 revision. July 2012

Graph production: Immunization Vaccines and Biologicals, (IVB), World Health Organization. 194 WHO Member States..

# WHO's support to GAVI's Vaccine Investment Strategy (VIS)

- Disease prioritization based on a multi-attribute assessment strategy; SAGE endorsed
- HPV, JE, rubella, Typhoid
- GAVI independent review according to 10 public health and strategic criteria

WHO to develop vaccine landscape analysis<sup>o</sup>

GAVI and WHO to condense list using BoD criteria

GAVI independent review during 2013 according to criteria to be developed

2008

2011

2012

2013



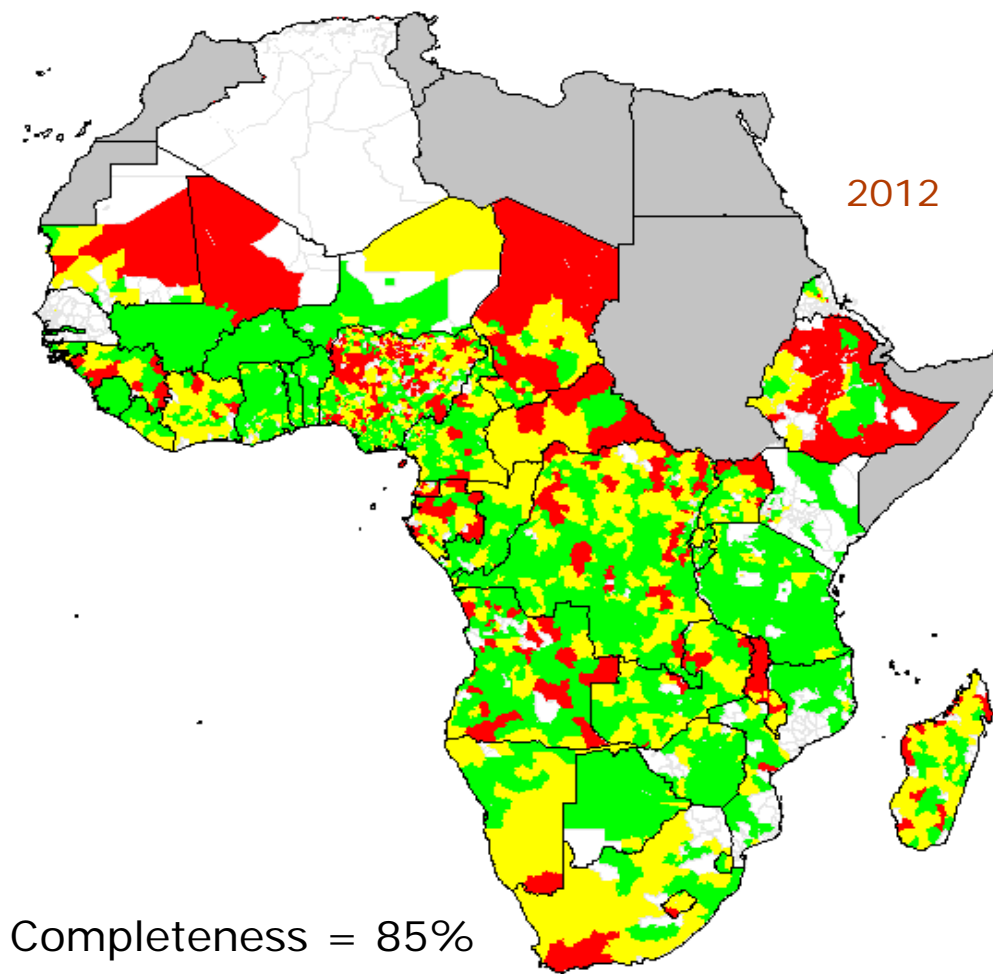
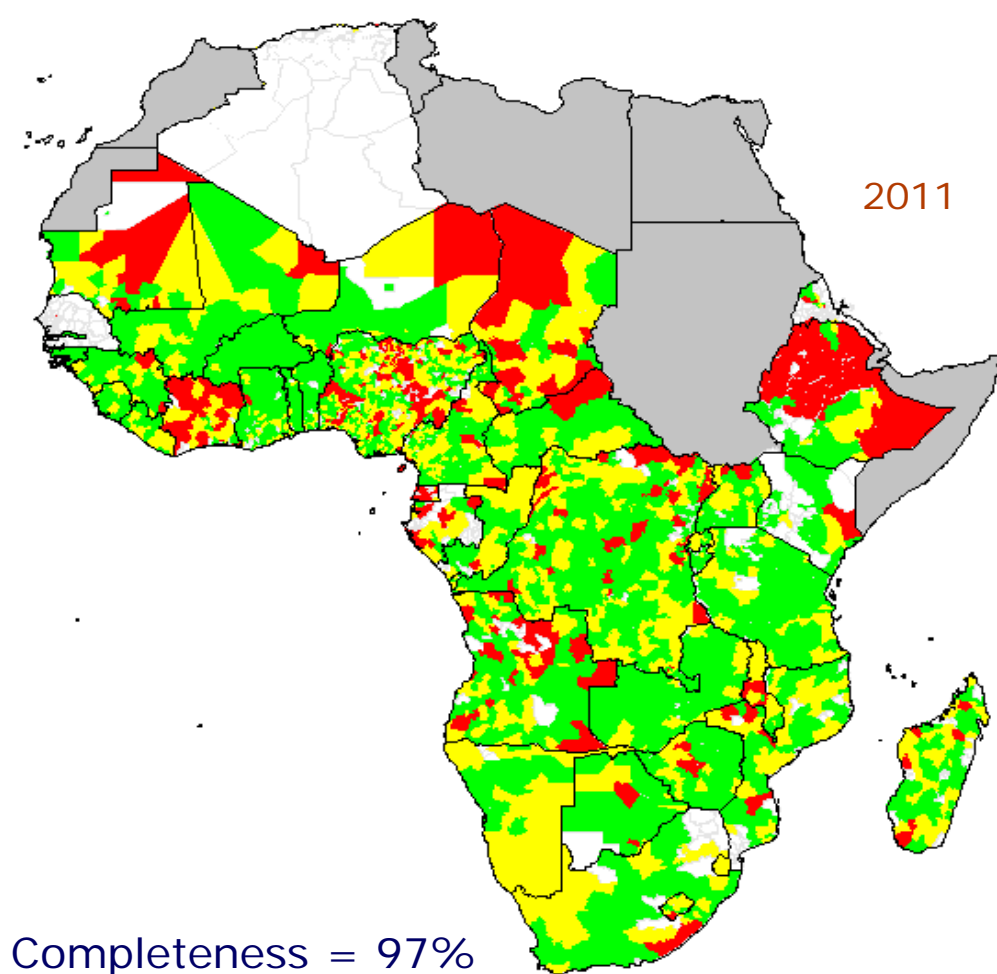
# Regional updates

## RTAGs recommendations

# AFRO

- **Task Force on Immunization (TFI) meeting – June 2012:**
  - Rubella control/CRS elimination : regional strategy adopted
  - Communication for immunization: strategies to effect changes in behaviors and measurement of impact
  - Implementation research agenda :
  - Polio eradication: assessing progress made
  - Review of recent SAGE recommendations and their implications for the African Region.
- **Regional Committee – Nov 2012**
  - Plenary session on DoV/GVAP-GAVI
- **TFI/African Regional Conference on Immunization – Dec 2012**

# OPV3 Routine admin Coverage by district in AFR January-June 2011 & 2012



■ < 50%    ■ 50 - 79%    ■ ≥ 80%    □ ND/ No matching

Source : Countries' routine EPI database submitted to AFRO in a monthly basis

6-8 November 2012 SAGE Meeting



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## XX TAG Meeting, 17-19 October 2012

<i>Decision agenda items</i>	<i>Information agenda items</i>
Rotavirus vaccination age-restrictions	Measles, rubella and CRS elimination in LAC
Pertussis vaccination strategies and surveillance	Global Vaccine Action Plan (GVAP)
Use of thimerosal	PAHO Revolving Fund
Transitioning from OPVt to OPVb/IPV	Standardization of TAG procedures
Regional vaccine production self-sufficiency	Haiti immunization program
Cholera vaccination	

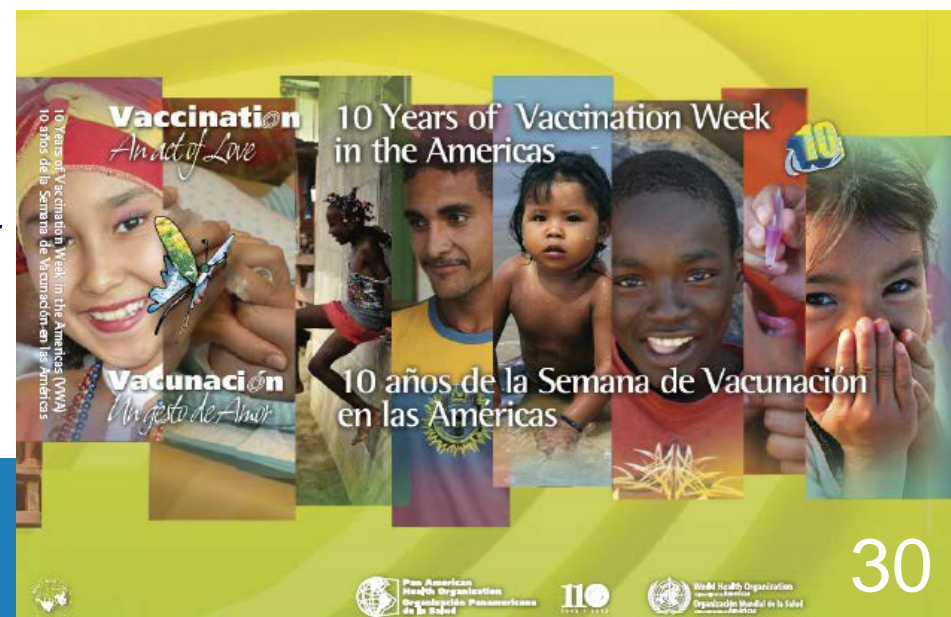
- PAHO TAG terms of reference (ToRs) will be aligned with SAGE ToRs
- PAHO secretariat will present annual progress reports on GVAP indicators to Regional TAG
- Progress report on GVAP indicators will be presented to PAHO Directing Council following revision by TAG



# 10<sup>th</sup> Anniversary of Vaccination Week in the Americas

- Celebrated in April 2012 simultaneously with the other WHO Regions in the first ever **World Immunization Week**, subsequently endorsed by WHA 65.18.
- The slogan ***“For you, for me, for everyone. Get vaccinated”***
- Dozens of VWA launching events were held, including events in the context of the 6<sup>th</sup> Summit of the Americas in Cartagena, Colombia.
- Over the last decade, more than 400 million individuals of all ages have been vaccinated under the framework of VWA.
- During the 28<sup>th</sup> Pan American Sanitary Conference in September, a new PAHO publication, *“Vaccination: An Act of Love. 10 years of Vaccination Week in the Americas”* was launched.

[www.paho.org/vwa](http://www.paho.org/vwa)



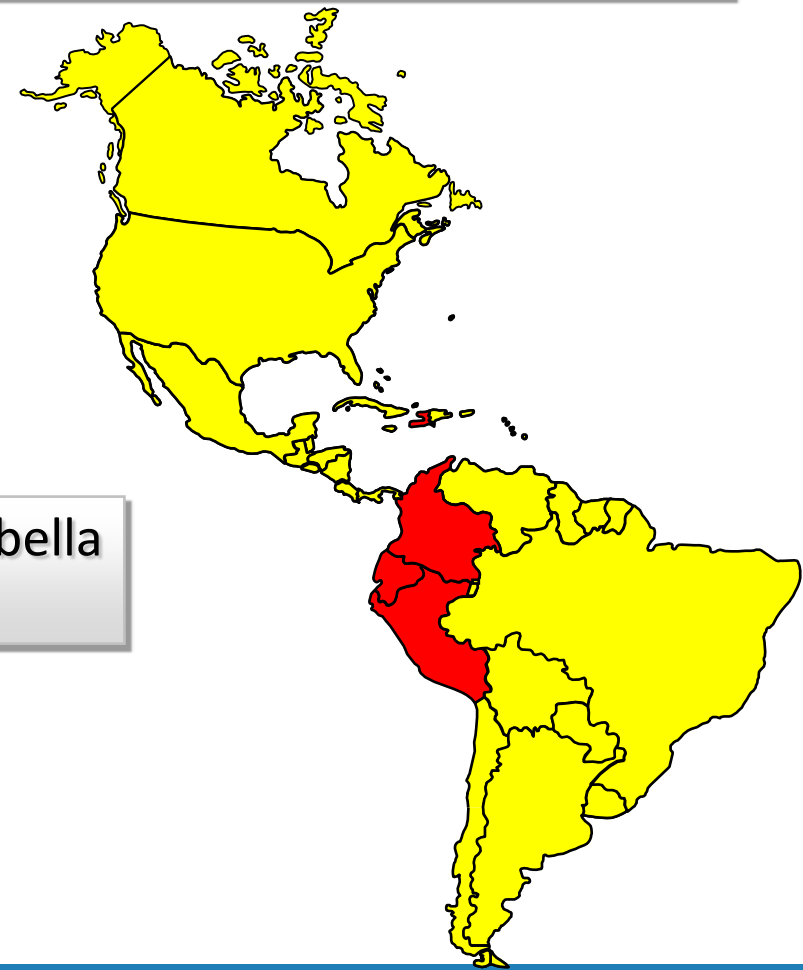
# Process to document and verify the absence of the endemic measles, rubella, and CRS in the Region of Americas

Based on the evidence, it appears that the Region has achieved elimination of endemic measles, rubella, and CRS.

- 20 countries and territories have returned their elimination reports
- 4 countries have not yet submitted their reports

2012: The Emergency Plan of Action to Maintain Measles/Rubella Elimination in the Americas

The objective of this plan is to maintain high quality standard surveillance, effective outbreak response, and high levels of immunization coverage  $\geq 95\%$



# EMRO

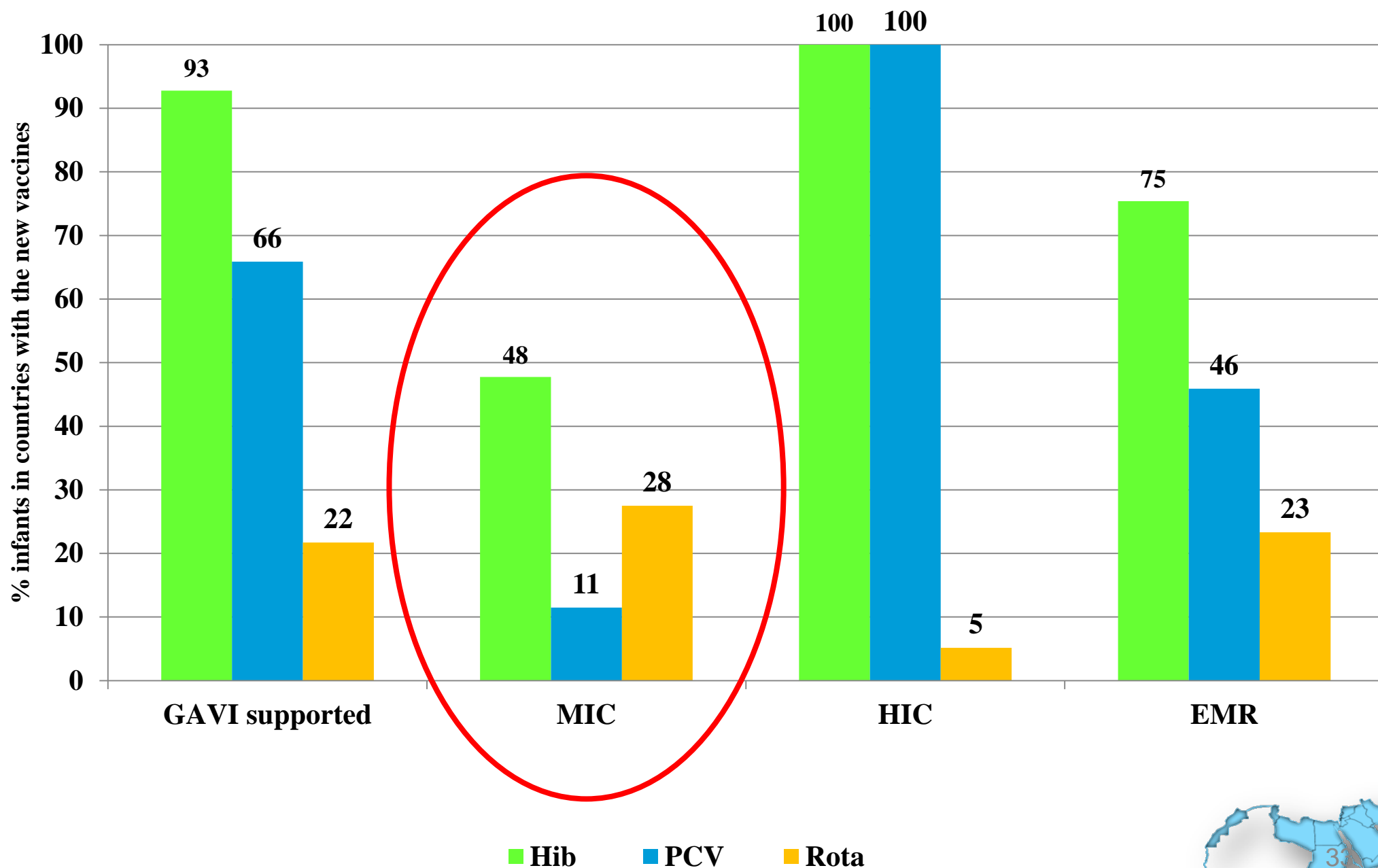
## ● Programme Managers' meeting

- Good progress but coverage target in 7 countries
- Emergency and security situations in increasing number of countries
- Coverage maintained in "Arab spring" countries in 2011 thanks to population demand for vaccines and good programme leadership
- High level commitment to immunization needs to be translated in additional financial allocation from Government
- Rubella/CRS elimination: revised target by 2020 to be submitted to RC
- Theme of the vaccination week 2013 : "Stop Measles Now"

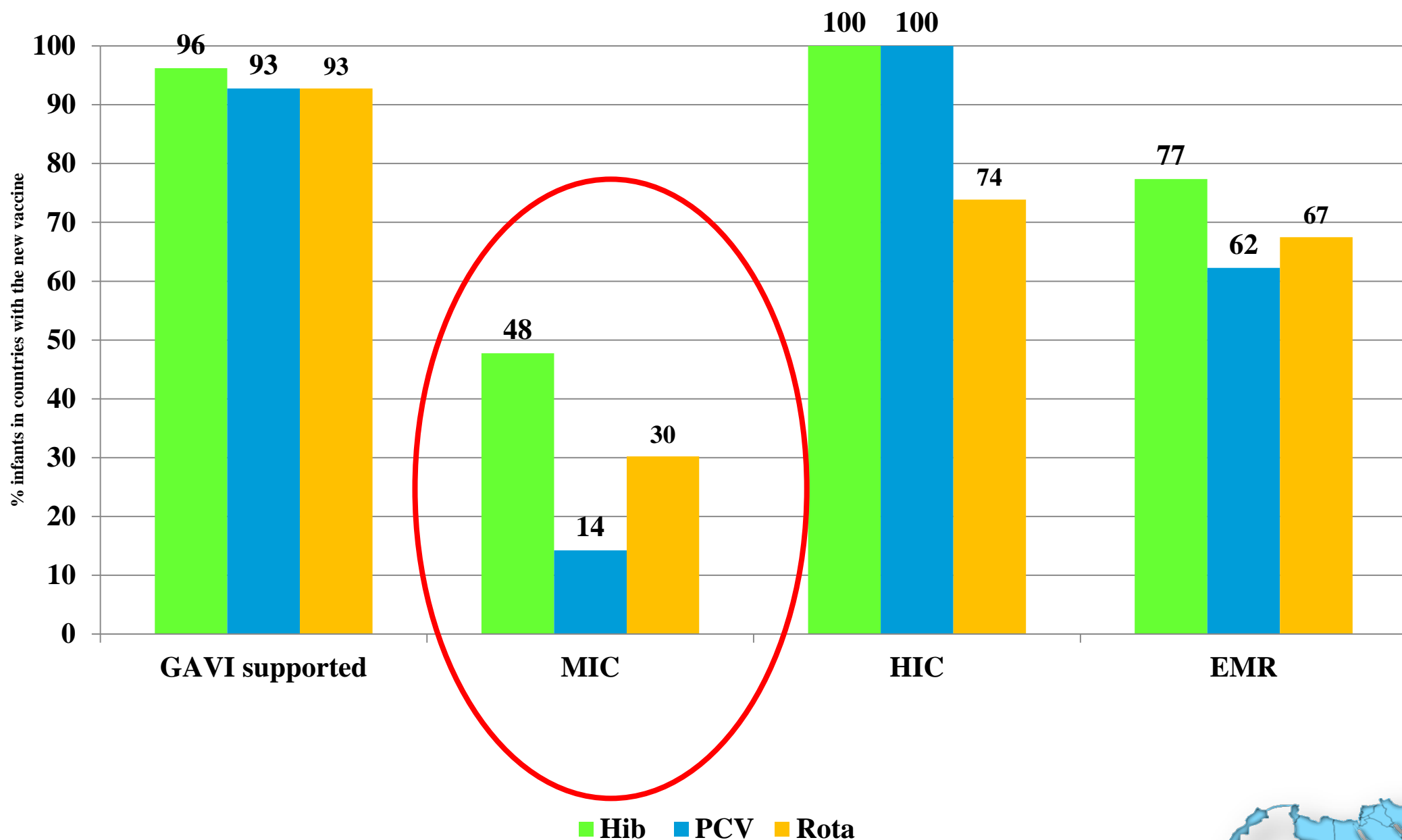
## ● Regional committee

- Resolution on Pooled Vaccine Procurement (PVP) reaffirmed
- Side meeting on DoV/GVAP

## Proportion of infants borne in countries offering new vaccines by EPI according to income categories, as of October 2012



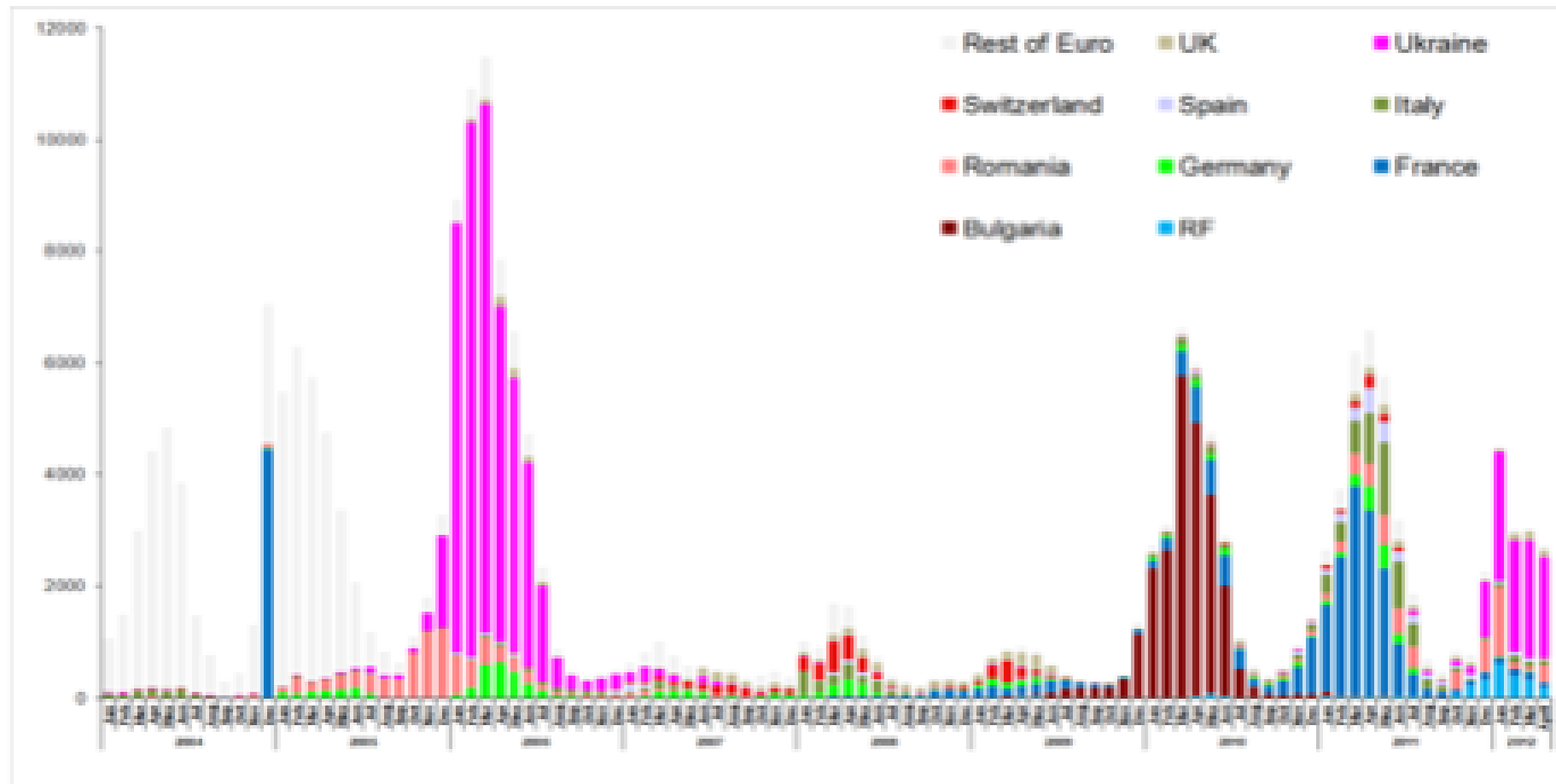
# Proportion of infants borne in countries offering new vaccines by EPI according to income categories, expected 2013/2014



- Ministerial meeting on Immunization at the Regional Committee - Sept 2012
- 12<sup>th</sup> meeting of TAG (ETAGE) - October 2012
  - adult immunization strategies
  - National Immunization Technical Advisory Groups (NITAGs),
  - tailoring immunization activities for underserved population groups,
  - introduction of combined vaccines,
  - introduction of rotavirus vaccine,
  - Regional application of the Global Vaccine Action Plan (GVAP),
  - rubella and congenital rubella syndrome.
- Terms of reference for ETAGE revised for alignment with SAGE

# Pockets at Risk for VPD

The risks are real: Number of confirmed measles cases by month and year (2004-2012)



Data Source: Monthly measles and rubella data reporting to GISD  
Data as of May 2012



# SEARO

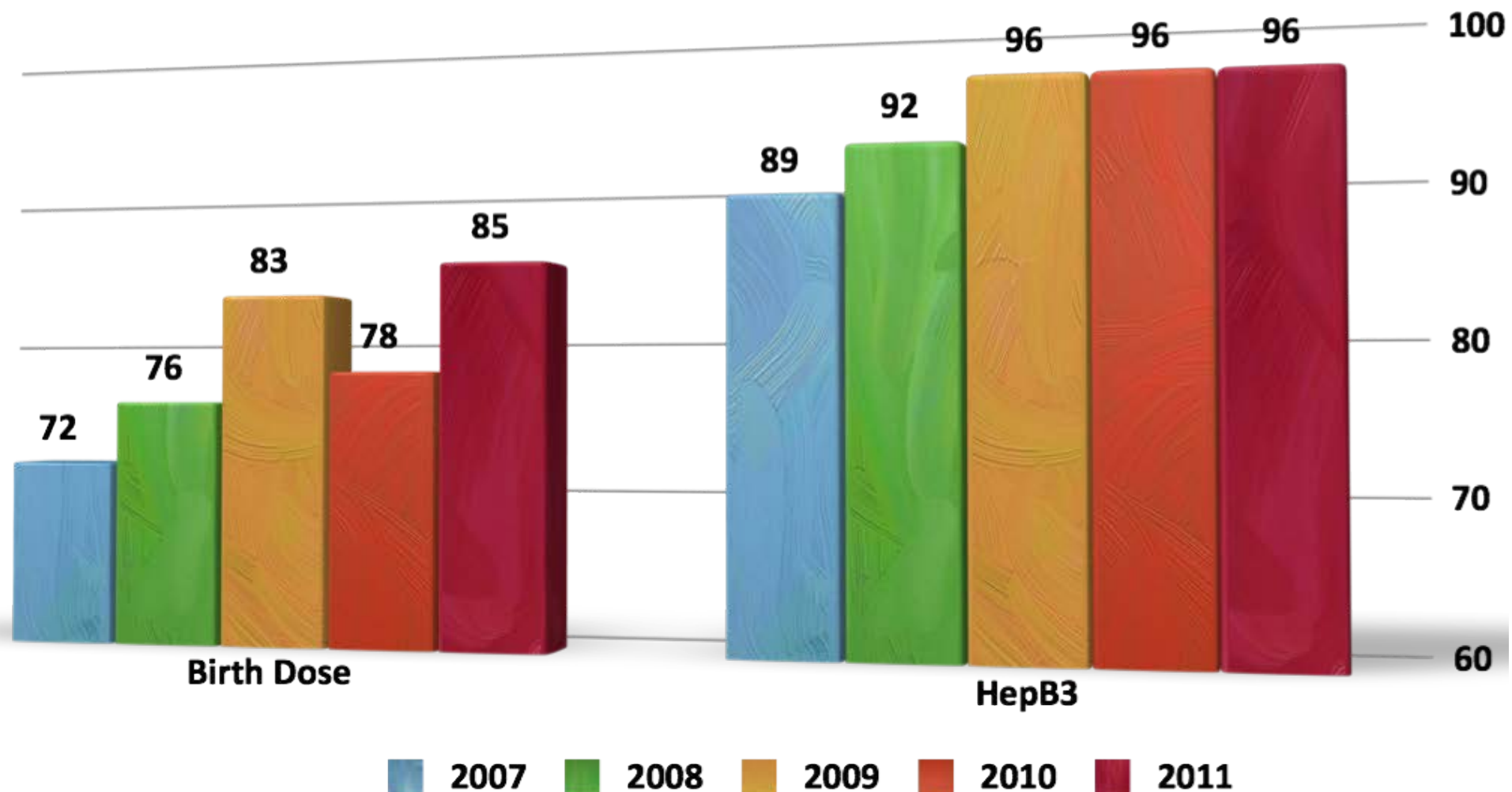
- **Intensification of Routine Immunization – year 2012**
  - Carried with support of RCM
  - Focus on increasing access to hard-to-reach, underserved, marginalized and migrant populations
- **EPI managers' meeting - October 2012**
  - India polio-free status for 2<sup>nd</sup> year
  - diphtheria outbreak in Indonesia
  - Of 11 member states, 9 with Hib/penta; 4 with JE; 6 with measles and rubella;
  - Strong interest in typhoid and dengue vaccines

# WPRO

## ● TAG meeting – August 2012

- Measles elimination by 2012 - on the right track
- Hepatitis B : new target for reaching childhood prevalence to <1% by 2017
- Regional Alliance for NRAs in the Western Pacific Region : a platform to strengthen NRA systems
- Sub-regional AEFI causality assessment committee for Pacific island countries and areas.
- Polio-free status: subnational risk assessments and additional measures to reduce the risk of new outbreaks; continued cross-regional collaboration
- New vaccines: quality data to be generated for burden of disease evidence, economic analysis, post-introduction evaluations and impact assessment
- Maternal and Neonatal Tetanus Elimination achievements
- Strengthening NIP and DoV/GVAP roll-out

# Regional Vaccination Coverage with Hep B, 2007 - 2011



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# **Update**

**SAGE processes**

**Working Groups**

**Related Committees**

# **2013-2014 SAGE Meetings: Topics on the Horizon**

## **Cross-cutting and strategic issues**

**Dealing with vaccine hesitancy (April 2013)**

**Non specific effects of vaccines (April 2013)**

**Use of vaccines in immunocompromised populations**

**DOV GVAP monitoring of implementation**

**Maternal immunization to enhance the protection of mothers and infants**

**Involvement of the private sector**

**Strengthening of NITAGs  
Vaccine stockpiles**

**Accessibility to affordable vaccines and WHO's role**

**Supply chains**

# 2013-2014 SAGE Meetings: Topics on the Horizon

## Vaccine specific recommendations and updates

### **Polio**

Eradication strategies

Post eradication

### **Impact monitoring**

Measles elimination

Pertussis

Hep B

Hib

Meningitis....

**HPV (Apr 2013?)**

**Malaria (Apr 2013 and Apr 2015)**

**Dengue (Apr 2013)**

**Yellow Fever (Apr 2013)**

**Varicella & herpes zoster (Nov 2013)**

**Pertussis (Nov 2013)**

**JE**

**Influenza**

# TB Vaccine update

- TB Vaccines are entering into a critical phase, with pivotal trials being imminent
- **WHO Technical Expert Group** established to provide guidance on
  - data needed from clinical trials to assess potential public health impact of the new TB vaccine
  - interpretation of phase II-IV trial data, with a focus on long-term safety and effectiveness
- 10 members, Chair: Greg Hussey (UCT, South Africa), SAGE representative: Juhani Eskola
  - 1<sup>st</sup> meeting in Q1 2013

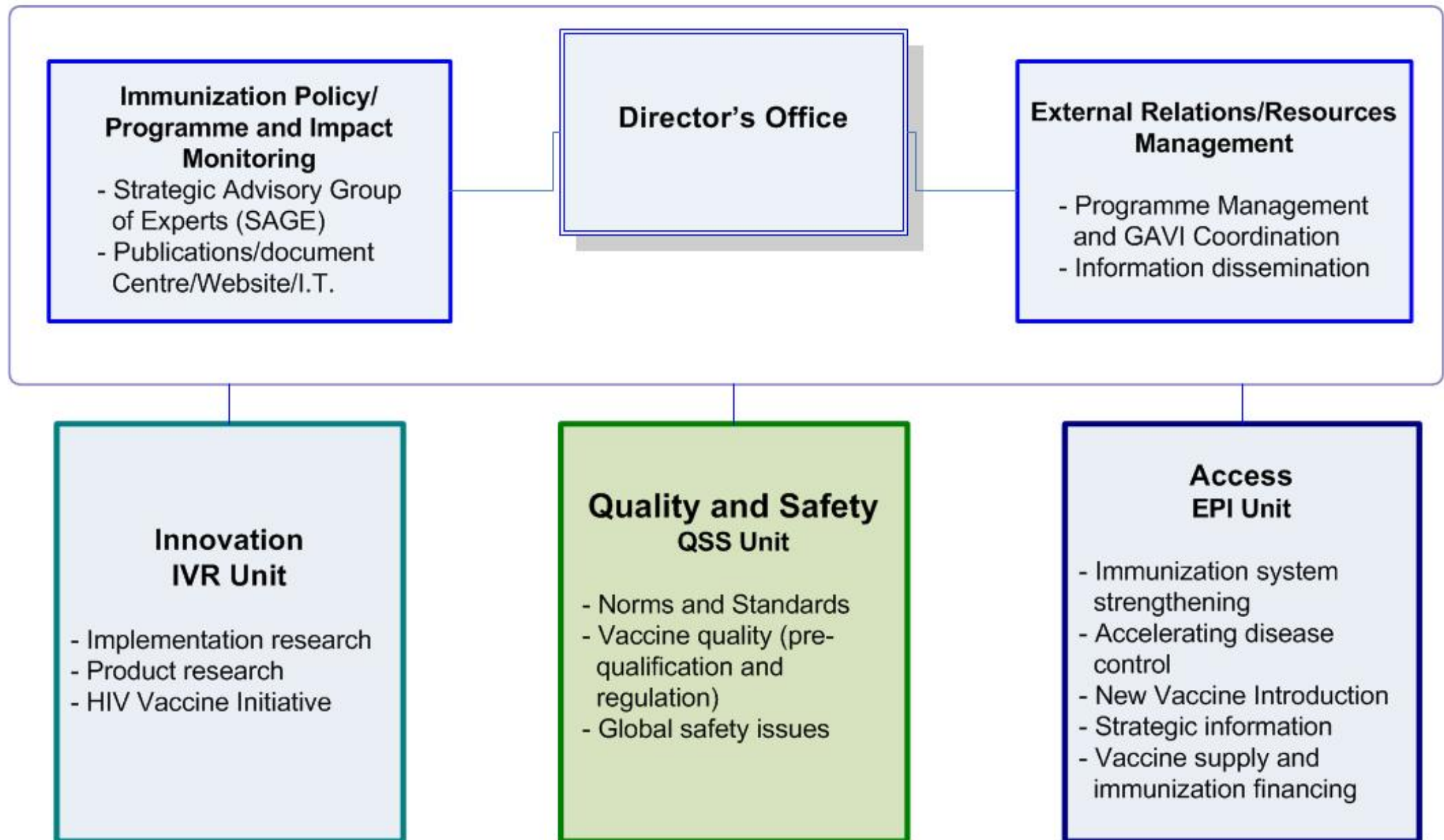


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# WHO restructuring

# Department of Immunization, Vaccines and Biologicals (IVB)

## *Main functions and structure*



# In summary

Globally - progress is good though Routine  
Immunization coverage remains flat

Collective actions in key cross-cutting areas needed  
especially in support of countries with large un-  
vaccinated children

# The World Health Assembly endorsed the Global Vaccine Action Plan

Urged member states to

- apply
- commit
- report



# Thank you



# Informal Pertussis Meeting, 26 September 2012: Conclusions

■ Australia, Canada, UK, USA experiencing **increases in pertussis that could be linked to the duration of protection with aP** and with some increased deaths in the very young infants, but pattern different in each country.

■ Number of cases in young infants could probably be attributed to more circulation of disease versus to reduced protection from passive antibody transfer by mothers immunized with aP but it is an issue being looked into.

■ **Evidence of waning immunity overtime data to suggest that children lower rate of disease than**

