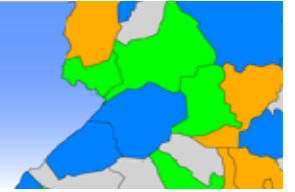




# SALB

Second Administrative Level Boundaries



## Overview, benefits and next stage

**Steeve Ebener**  
**WHO**

**UNFIP**  
**New York, 13th August 2009**

# Content

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- Overview of the SALB Project
  - Short history
  - SALB today
- Benefits of using & contributing to SALB
- Next stage for SALB
- Questions and Discussion

# The SALB project – short history

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**2000: First meeting of the UN Geographic Information Working Group (UNGIWG)** 

➔ **International and administrative boundaries recognized as key cross cutting layers for all the UN**

➔ **Establishment of two task groups:**

- **International Boundaries (land and maritime) and Coastlines**

Task Managers: Ms. Hélène Bray, Cartographic Section/LIRD/DPI  
Mr. Robert Sandev, Law of the Sea/OLA

- **Administrative Boundaries**

Task Managers: Mr. Steeve Ebener, WHO  
Mr. Uwe Deichmann, The World Bank  
Mr Amor Laaribi, DESA

# The SALB project – short history

## 2001: Preliminary inventory of existing administrative boundaries datasets

UN Programmes / Agencies	UNHCR	UNICEF	UNEP	UNESCO	FAO	WB	WHO
Existence of admin boundaries database	Yes	Yes	Yes	Under const.	Yes	Yes	Yes
Data source	Various	Various	Various	?	Various	Various	Various
Country borders and coastlines	GIET	DCW	?	?	DCW	DCW	DCW, ADS
Number of countries covered at subnational level	?	45	?	?	118	?	157
Total number of admin unit at the lowest level	?	7699	?	?	33883	?	37769
Redistribution for UN agencies	Partial	Yes	Partial/?	?	Yes	?	Yes

Research center / Industry partners	CIESIN	ESRI	Landscan
Existence of admin boundaries database	Yes	Yes	Yes
Data source	Various	ESRI/?	Various
Country borders and coastlines	DCW	Various	DCW
Number of countries covered at subnational level	161	146	161
Total number of admin unit at the lowest level	126000	9647	69211
Redistribution for UN agencies	Partial	Under discussion	No

178 countries were taken into account in these tables (191 UN Member States without Barbados, Cook Islands, Dominica, Grenada, Monaco, Nauru, Niue, Palau, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, Samoa, San Marino)

- ➔ **Most, if not all, thought the administrative units (districts) were already mapped**
- ➔ **Emphasized the importance of putting a mechanism in place to combine the different sources together ➔ SALB**

# The SALB project – short history

Very quickly realised that the identified sources were presenting different numbers of administrative units!?

Country	WHO	FAO	UNICEF	UNEP	Landscan 98	CIESIN
Mexico		2461			2384	2406
Nigeria	775	554		538	540	538
South Africa	419	422	354	291		374

- ➔ Needed some kind of "ground reference"
- ➔ Start of the engagement with the National Mapping Agencies
- ➔ Creation of the SALB Historic Changes database and codes

01.01.1990-14.03.1991		15.03.1991-20.03.1997		21.03.1997-27.11.2000		28.11.2000-30.06.2001		01.07.2001-30.06.2005		01.07.2005-30.06.2006		01.07.2006-06.06.2007	
Butheryl	UGA982	Butheryl	UGA005	Butheryl	UGA005	Butheryl	UGA005	Butheryl	UGA005	Butheryl	UGA005	Butheryl	UGA005
		Mlungano	UGA039	Mlungano	UGA039	Mlungano	UGA039	Mlungano	UGA039	Mlungano	UGA039	Mlungano	UGA039
Mbarara	UGA991	Mbarara	UGA031	Mbarara	UGA031	Mbarara	UGA031	Mbarara	UGA031	Mbarara	UGA085	Mbarara	UGA085
										Ibamba	UGA072	Ibamba	UGA072
										Ishyiro	UGA073	Ishyiro	UGA073
										Muhura	UGA079	Muhura	UGA079
										Budela	UGA071	Budela	UGA071
		Tororo	UGA989	Tororo	UGA045	Tororo	UGA045	Tororo	UGA045	Tororo	UGA060	Tororo	UGA060
				Busia	UGA007	Busia	UGA007	Busia	UGA007	Busia	UGA007	Busia	UGA007
Tororo	UGA988	Pallisa	UGA040	Pallisa	UGA040	Pallisa	UGA040	Pallisa	UGA040	Pallisa	UGA040	Pallisa	UGA111
										Bulaka	UGA095	Bulaka	UGA095

- ➔ Funds from UNFIP and WHO, support from ESRI

# The SALB project – short history

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**2004: Using the historic changes database (126 countries) could come to the conclusion that 57% of the maps used within the UN were not even corresponding to the situation observed in countries in January 2000 !**

➡ **Task much bigger than primarily thought**

➡ **Importance of the time (historic data) component**

**2005: The tsunami in South East Asia highlighted the importance of the direct channel that SALB establishes with National Mapping Agencies (NMA)**

➡ **Creation of the NMA contact information database**

# SALB today

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- **A channel and a collaboration between the UN and the NMAs**
- **A team made of:**
  - **Coordination office at WHO HQ, Geneva**
  - **Regional nodes (UNECA; UNECLAC, UN Map library, WHO, UNESCAP, Asian Institute of Technology)**
  - **Volunteers**
- **Continued collaboration with the UN Cartographic Section regarding the international boundaries and coastlines**
- **A documented process which:**
  - **ensures data compatibility between countries**
  - **could be applied to other layers**

# SALB today

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- A working platform for the collection, management, visualization and sharing of sub national data/information:
  - covers all the UN Member States
  - is freely accessible (non-commercial use => copyright)
  - is validated by the National Mapping Agencies
  - is standardized (international border, metadata, spelling, coding scheme, editing)
- The only authoritative and seamless dataset for Second Level Boundaries (District/County level) to address today's challenges, including but not limited to:
  - Climate change
  - Health pandemics
  - Disaster risk reduction
  - Poverty

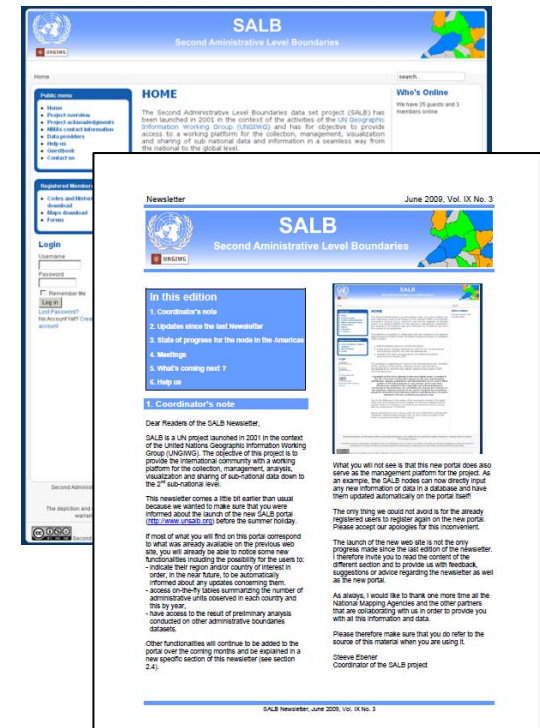
# SALB today

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- **A database consisting of:**
    - **National Mapping Agencies contact information**
      - **168 countries (71 updated in 2009)**
    - **Coded historic changes starting from 1990 at the 1st sub national level and from 2000 at the 2<sup>nd</sup> sub national level**
      - **January 2000 table for 172 countries**
      - **Historic changes for 138 countries (30 reaching 2009)**
    - **GIS format maps corresponding to each administrative structure observed since January 2000**
      - **validated for 48 countries (15 reaching 2009)**
      - **under validation for 50 countries (accessible to the UN)**
- ➔ **51 % of all UN Member States**

# SALB today

- A new portal ([www.unsalb.org](http://www.unsalb.org))
  - access to the SALB database
  - management platform for the project
  - ~950 visits/month
  - 271 users registered on the new portal since the launching (26 June 09)
- A newsletter (sent every 3 months)
- A facilitator to establish links between different communities:
  - within countries (i.e. NMA and health sector)
  - between the NMA, the international community and the private sector



# SALB today

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- **A point of entry for the UN to several regional and global initiatives/committees including:**
  - **the International Steering Committee for Global Mapping (ISCGM)**
  - **the Permanent Committee on Spatial Data Infrastructure for the Americas (PC-IDEA) and the Pan American Institute of Geography and History (PAIGH)**
  - **the Permanent Committee on GIS Infrastructure for Asia & the Pacific (PCGIAP)**
  - **the Committee on Development Information, Science and Technology (CODIST)**
  - **the Global Spatial Data Infrastructure (GSDI)**

# SALB today

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- **A contribution to the building of the content for the Global Spatial Data Infrastructure (GSDI)**

## ➔ **A philosophy of work**

- **long term sustainable process instead of "quick and dirty" work**
- **countries at the centre of the process with the UN playing a facilitation role**
- **large and collaborative approach to take advantage of each institution mandate, skills and area of work**

## ➔ **More than just an other database**

# Benefits of using & contributing to SALB

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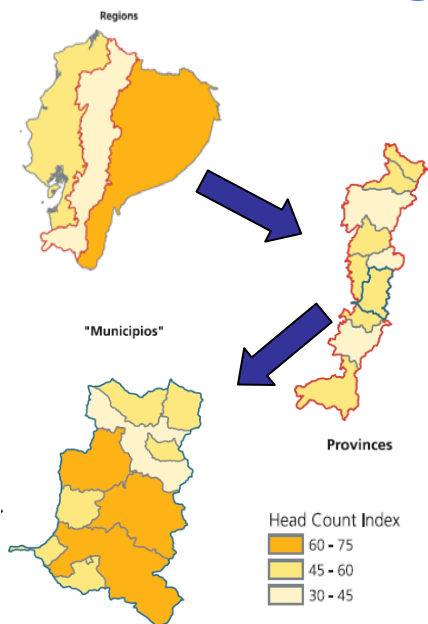
Using authoritative information and data validated by the countries allows to:

- assess the quality and/or level of completeness of other datasets (only 25 to 40 % correct)
- reduce duplication of efforts and therefore transfer resources to other priorities
- ensure the collection, management and sharing of information and data corresponding to a reality on the ground
  - proper information management
  - real data compatibility

# Benefits of using & contributing to SALB

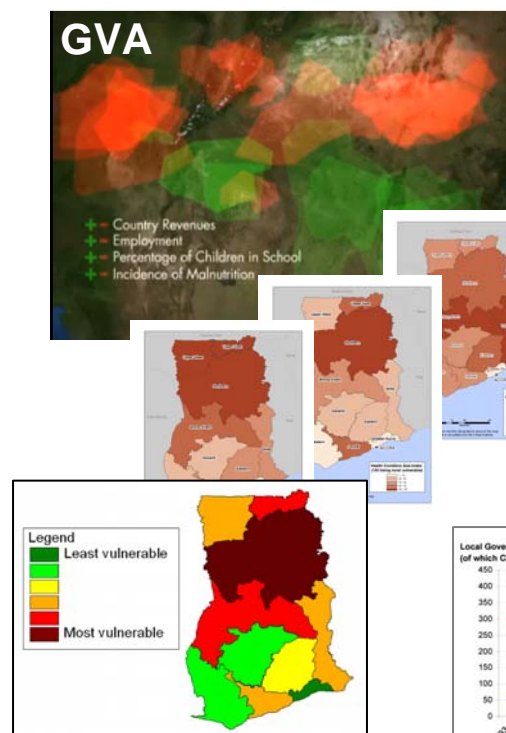
- effective decision making

## MDG Monitoring

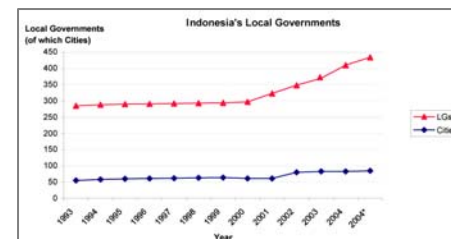
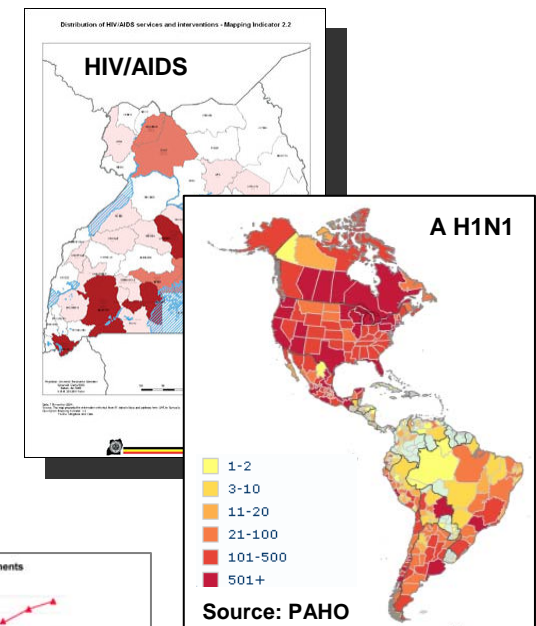


Sources: Boundary files from Centro Internacional de Agricultura (CIAT). Poverty estimates from Hentschel et al. 2000.

## Population vulnerability



## Disease Pandemic



trough time

# Benefits of using & contributing to SALB

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**Establishing a direct channel with the National Mapping Agencies in countries allows to:**

- **access data and capacities much faster in time of crisis**
  - **Thailand (2004): 2 months to get the data**
  - **Indonesia (2006): 8 hours !**

**➔ Support response**

- **link the NMAs with other sectors in countries...  
...as well as with the international community and potential donors (NSDI)**

**➔ Capacity building and sustainable development**

# Next stage for SALB

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## 1. Institutionalize the project

- The administrative structure of countries will continue to evolve
- The project has reached its maturity in terms of:
  - process
  - network
  - human resources
  - management
  - ...

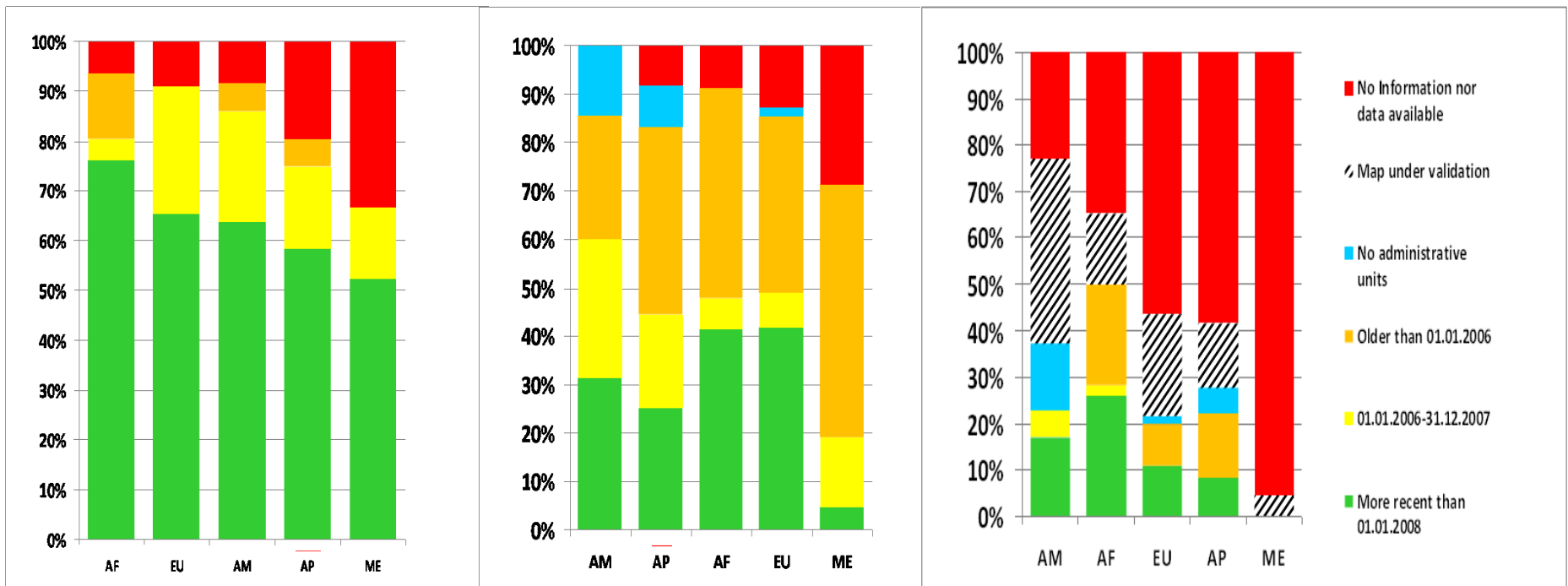
 **We can convert the project into a long term initiative**

# Next stage for SALB

## 2. Expand the actual partnership to fill the gaps

### NMA contact information

### GIS format maps



### Historic changes table

# Next stage for SALB

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## 3. Improve some technical aspects

- **International boundaries**

**➔ Continue to support the improvement of the UN international boundaries knowledge base by the UN Cartographic Section**

- **Coastlines**

**➔ Replace the current coastline by a more accurate dataset (current discussions with NGA)**

# Next stage for SALB

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**In order for this to happen we would need to:**

- **Put the SALB project under the umbrella of the UN Secretariat**
- **Find an institution based in Geneva ready to host an half time position to supervise the technical aspect of the project (staff already working on the project and funds available for the coming year)**
- **Bring additional UN agencies on board of the partnership**
  - **reach NMAs in countries where we still have gaps**
  - **catch the present as soon as possible in order to put the project into the updating mode**
- **Secure long term funding (SALB, International boundaries)**