

# WHO Regional Perspectives

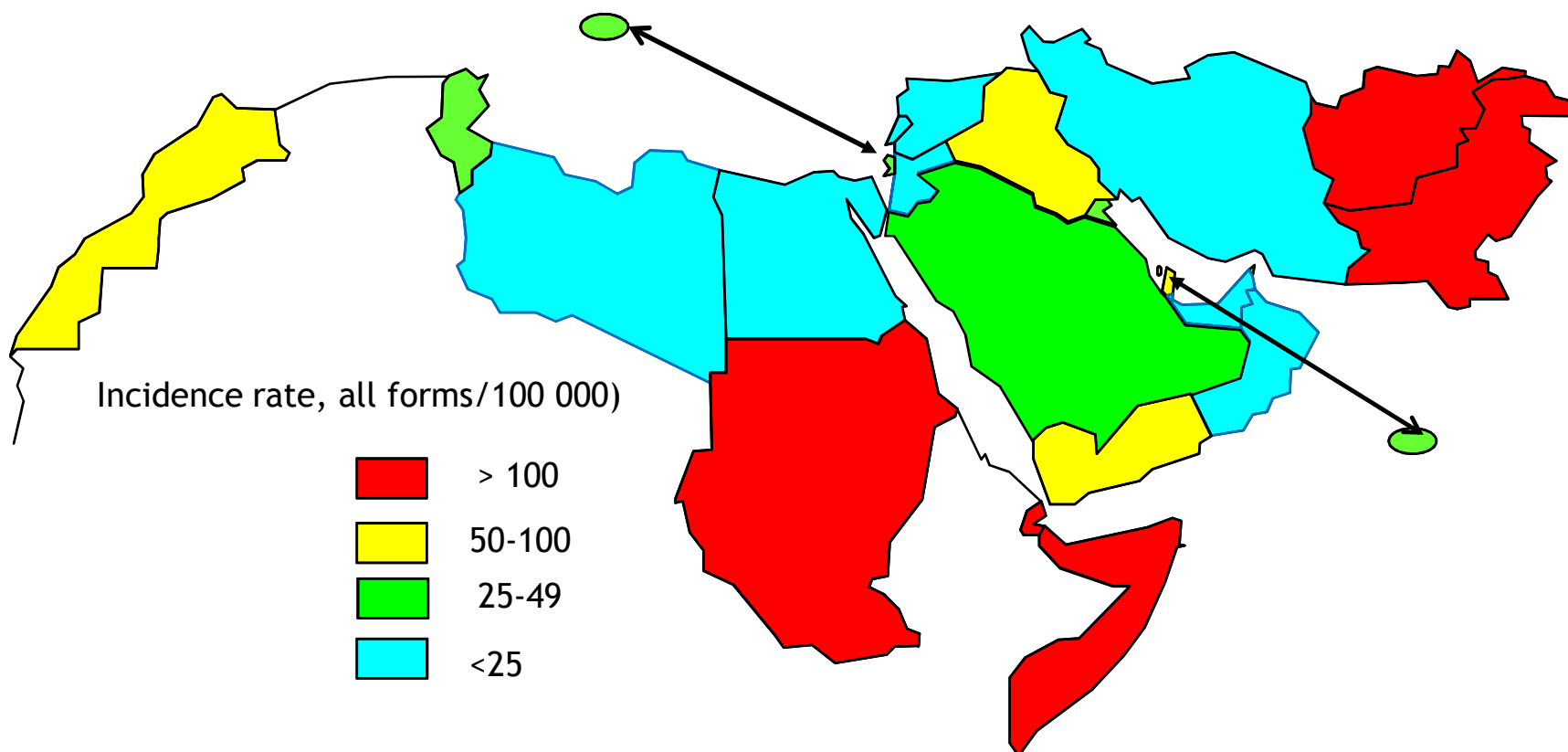
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*Global Consultation of the SRLN  
Geneva 14-15<sup>th</sup> April 2010*

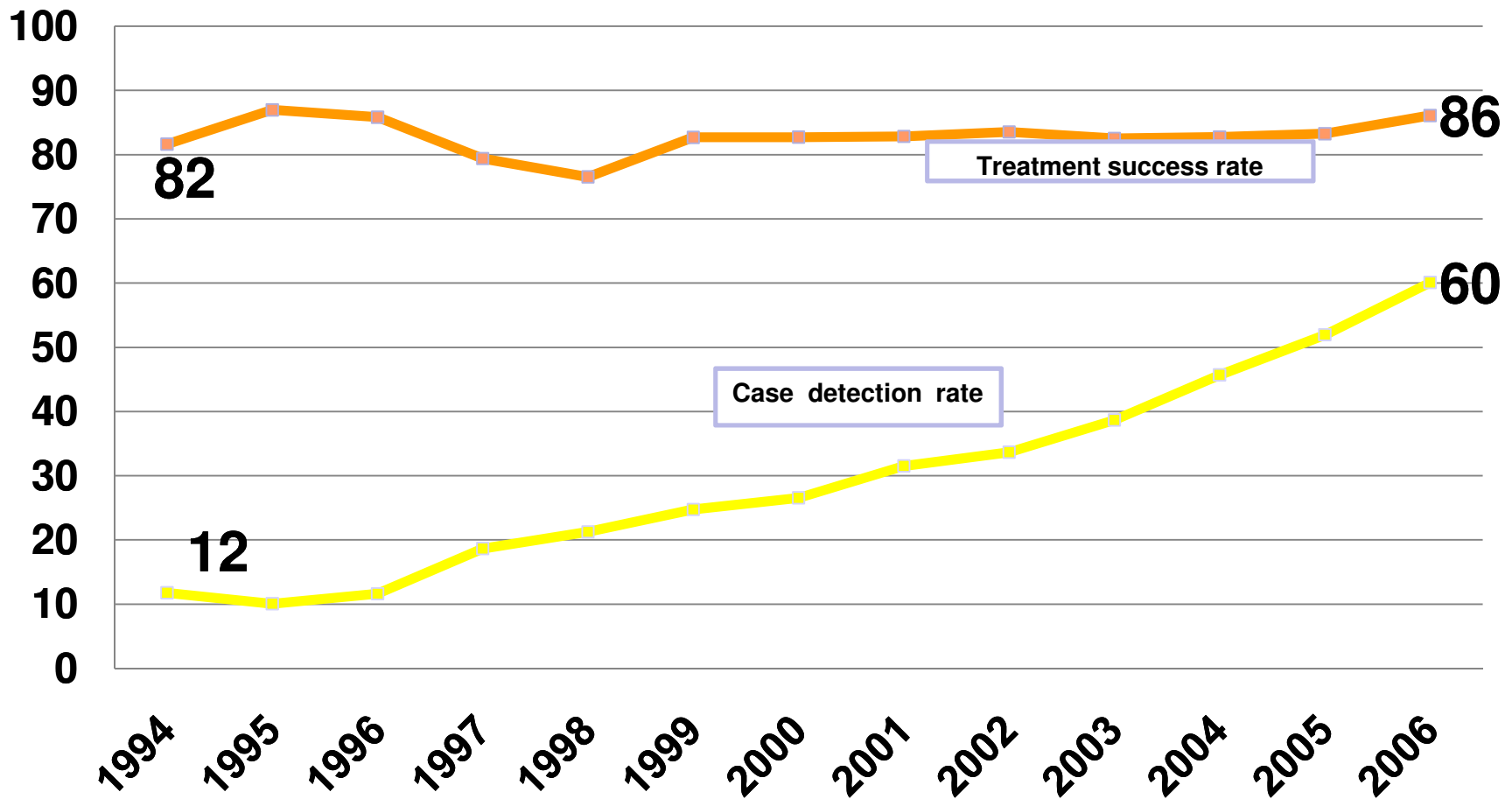
# Regional burden of TB

## Estimated TB incidence (all forms)



# Expansion of TB care based on DOTS

Case detection rate (CDR) and treatment success rate (TSR)  
EMR, 1994–2006

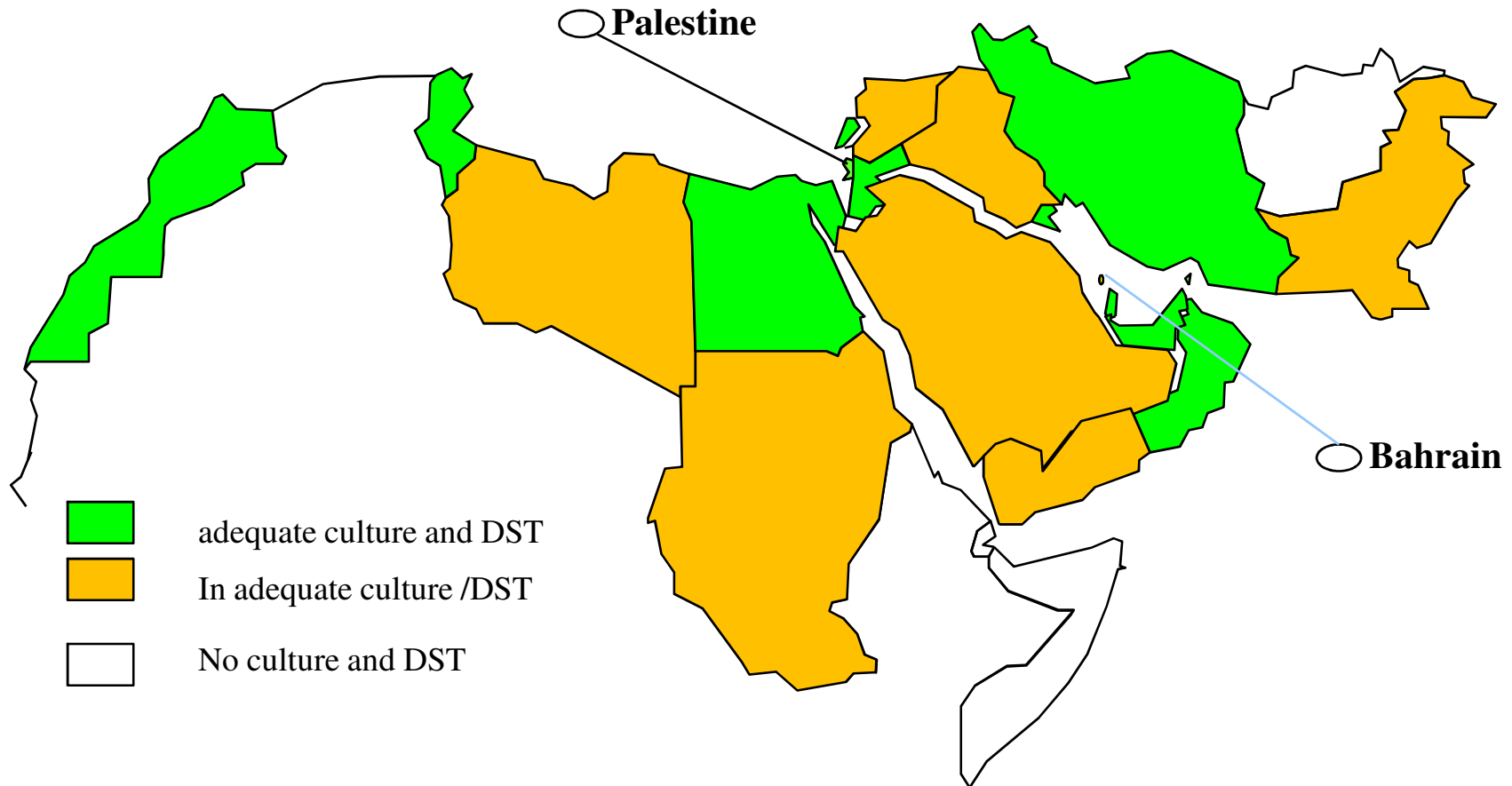


# Measuring MDR burden using drug resistance surveys and surveillance



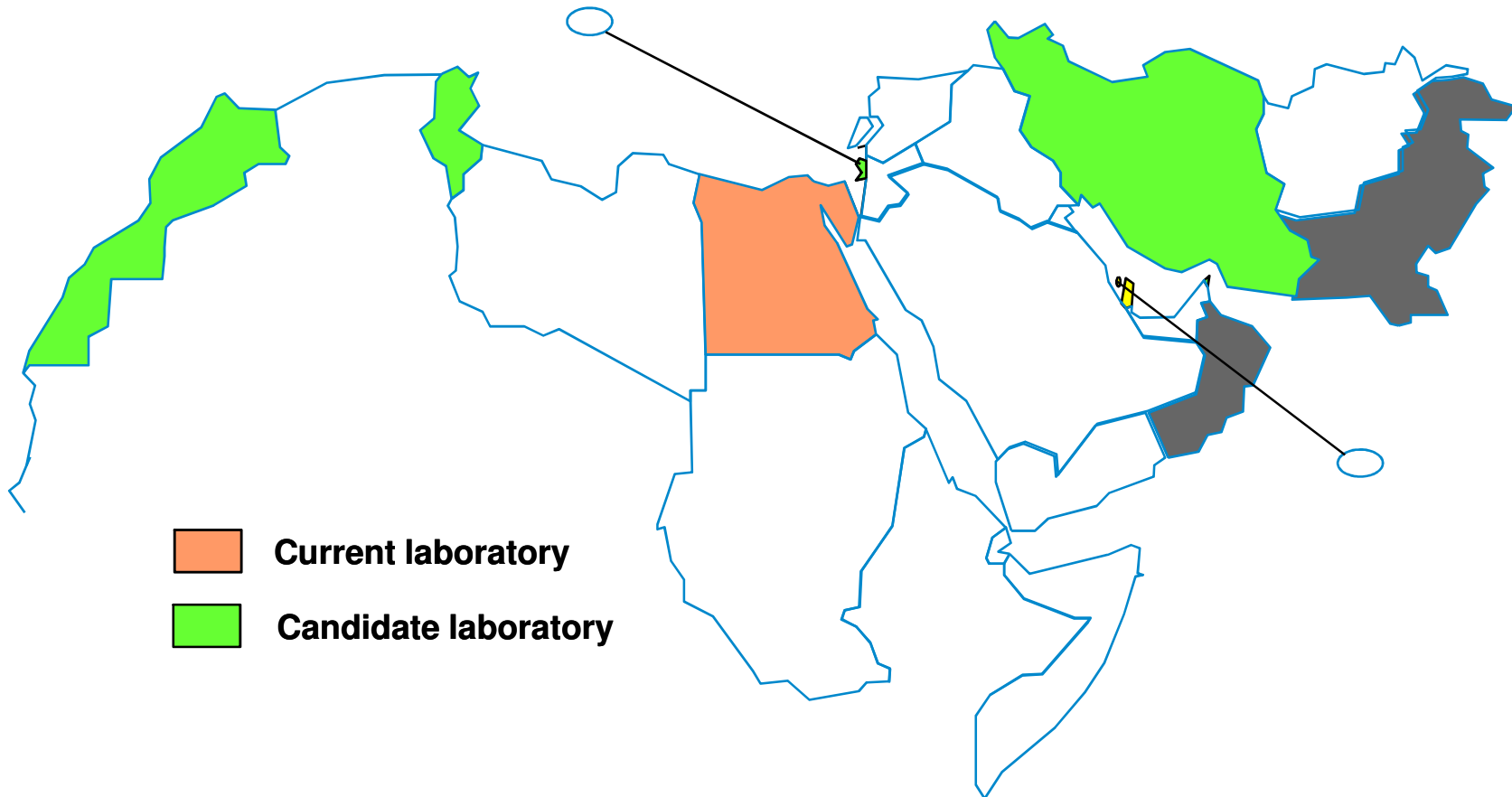
Source: WHO Global TB Report 2008 plus national TB programme information

# Culture and DST



WHO Global TB Report 2008

# Supranational reference laboratories, 2009



# In summary

- ▶ **Countries of the region are doing fine with TB treatment but case detection is still a challenge.**
- ▶ **MDR TB is another challenge for TB control.**
- ▶ **Both challenges are raising a question about the diagnostic capacity in terms of quantity, quality and accessibility.**
- ▶ **To meet the challenges, we need to scale up the diagnostic capacity through strengthening the TB laboratory network and building a strong and effective SRLN**

# The EMR-SRL guidance document



**This document is prepared to highlight the following topics in establishing a Regional Supra National Reference Laboratory Network for TB:**

- **Major criteria to select a candidate NRL as Supra National Reference TB laboratory (SRL).**
- **Methodology to evaluate a TB laboratory as SRL.**
- **The Terms of Reference (the proposed duties and responsibilities) for a selected SRL.**
- **The resources required to establish a regional Supra National Reference TB Laboratory Network (SRLN).**



# Major criteria to select a candidate NRL as SRL

- ▶ **The technical proficiency.**
- ▶ **Quality assured sputum smear microscopy.**
- ▶ **Expanded case detection using culture, particularly liquid media.**
- ▶ **Adequate bio-safety measures.**
- ▶ **Recording reporting system in line with global standards.**
- ▶ **Qualified HW**

# Methodology to evaluate a TB lab as SRL



- ▶ **Agreement of National Health Authorities.**
- ▶ **Evaluation tool with the following set of data:**
  - **The structural, functional and policy profile of the TB laboratory network which the NRL in question is heading**
  - **Quality assurance programme for (a) microscopy, (b) culture) and (c) DST**
  - **Laboratory performance analysis, such as volume of work (microscopy, culture and DST) *plus* corresponding results,**

# Methodology to evaluate a TB lab as SRL



- **Human resource : the technical staff of the NRL, its qualifications; planning of recruitment and of training courses**
- **Safety measures and practices used in the NRL, both equipment (including the structure and workflow in this laboratory) and the relevant procedures;**
- **Budget required for adequate laboratory function**
- **Cooperation between the National TB Laboratory Network and the NTP,**

# The duties of an SRLN member



- ▶ **Technical assistance and advice** to National Reference Laboratories in all relevant matters including both visits to the NRL in question and training of staff members from the given NRLs (EQA, C and DST, DRS and IC), in addition to proficiency testing.
- ▶ **Participation in NTP oriented applied research** within the frame of the SRL network
- ▶ **Public health approach:** The laboratory networks are often prone to operate on the principle *sample* → *result*. Thus ensuring that e.g. HCWs will have an adequate level of awareness to identify a TB suspect case for further investigation.

# The costing exercise of the SRL network in EMR



The cost of the following items to be considered during the budgeting exercise:

- Recruiting additional staff and improving the capacity of the current staff.
- TOT training courses annually in each SRL (Culture, DST, EQA for DSM, transport of specimens)
- Review missions annually to the targeted countries (technical assistance).
- Distributing batches for proficiency testing of DST from SRL to its targeted countries
- Regional annual meeting of the SRLN members to exchange experience.
- Web networking to share information and experience covering all the countries in the region plus the SRLN.
- The running cost of materials used for testing and other requirements.

# ***Issues and Findings Summarized from Laboratory Network of Countries Visited***



- **Infection control and bio safety measures in most settings are not optimal.**
- **EQA is in place but analysis of errors and actions taken for improvement is not done in some settings.**
- **IQC for DSM in all labs visited is in place but for C& DST not done in most settings or not recorded.**
- **Laboratory data management is not optimal .**
- **Enough budget for HRD and for lab is needed**
- **Operational research is deficient.**

# Issues and Needs Felt by SRL



- **Laboratory Assessment Tool used by consultants to assess candidates for SRL need to be modified to suit laboratories other than NRLs as in case of private laboratories .**
- **WHO regional office is kindly requested to help in sending panel of TB isolates to NRLs.**
- **Enhancement & encouragement of collaboration between SRLs in developed countries and other SRLs in developing countries through regular meeting for exchange of knowledge and gaining experience. .**

# Proposed next steps

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**There is a need to identify :**

- **Source of funds to support SRL network.**
- **Establish process and methodology for designation (Letter, MOU).**
- **Accreditation**