Health at the core of MDGs: the role of a German University

- MDG 1 hunger by 1/2
- MDG 4 child mortality by 2/3
- MDG 5 maternal mortality by 3/4
- MDG 6 HIV, malaria, tuberculosis: reverse trend
- MDG 7 ecological sustainability
  - halve # of people without access to safe water:
- MDG 8 global partnership
  - Access to affordable drugs
Heidelberg University

Germany’s oldest university (1386)
“Joining tradition and science of the future”

- Cosmopolitan: 18% of students are international
- Medical sciences ranked 1st + focus on int’l public health
Strategy: Triangulation and comparison

Country A

Teaching

Problem A

Research

Country B

Teaching

Problem A'

Service

Research

Service
<table>
<thead>
<tr>
<th>Activity</th>
<th>Operational</th>
<th>Formal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Teaching</td>
<td>Project-related training</td>
<td>Degree courses</td>
</tr>
<tr>
<td>2) Research</td>
<td>Operational</td>
<td>Strategic</td>
</tr>
<tr>
<td>3) Service:</td>
<td>Outpatient department</td>
<td></td>
</tr>
<tr>
<td>(i) care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii) consulting</td>
<td>EVAPLAN staff with university staff</td>
<td></td>
</tr>
</tbody>
</table>
Contribution to MDGs: 1) research

- Improve data and trends re: MDG indicators
- Describe and analyze nexus between health, education, housing and income poverty
- Develop and evaluate policies to reduce poverty
  - Health insurance
  - Quality of care (WDR 2003)
  - Drug/vaccine development and testing
- Look ahead of the current agenda
  - Health impact of global environmental change on the poor
### Weak data base to track progress

<table>
<thead>
<tr>
<th>MDG - Indicator</th>
<th>% countries lacking</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>trend data</td>
</tr>
<tr>
<td>Population living on less than 1 $/day</td>
<td>100</td>
</tr>
<tr>
<td>Children underweight for age</td>
<td>100</td>
</tr>
<tr>
<td>Net primary school enrolment ratio</td>
<td>46</td>
</tr>
<tr>
<td>Children reaching grade five</td>
<td>96</td>
</tr>
<tr>
<td>Births attended by skilled health personnel</td>
<td>100</td>
</tr>
<tr>
<td>Female share of non-agricultural employment</td>
<td>51</td>
</tr>
<tr>
<td>HIV prevalence women 15-24, urban</td>
<td>100</td>
</tr>
<tr>
<td>Population with access to clean water</td>
<td>62</td>
</tr>
</tbody>
</table>
## Differences in ranking of cause of death: DSS data (Nouna) versus GBD estimates

<table>
<thead>
<tr>
<th></th>
<th>GBD Class.</th>
<th>YLLs</th>
<th>Rank</th>
<th>(thousand)</th>
<th>Rank</th>
<th>DALY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaria</td>
<td>IA 8</td>
<td>3,033.9</td>
<td>1</td>
<td>3</td>
<td>24,385</td>
<td>4</td>
</tr>
<tr>
<td>Diarrhoeal diseases</td>
<td>IA 4</td>
<td>2,244.4</td>
<td>2</td>
<td>1</td>
<td>31,393</td>
<td>1</td>
</tr>
<tr>
<td>Lower respiratory infections</td>
<td>IB 1</td>
<td>1,281.4</td>
<td>3</td>
<td>2</td>
<td>29,533</td>
<td>2</td>
</tr>
<tr>
<td>Unintentional injuries *</td>
<td>III A</td>
<td>448.0</td>
<td>4</td>
<td>6</td>
<td>16,459</td>
<td>3</td>
</tr>
<tr>
<td>Protein-energy malnutrition</td>
<td>IE 1</td>
<td>280.8</td>
<td>5</td>
<td>15</td>
<td>3,285</td>
<td>17</td>
</tr>
<tr>
<td>Bacterial Meningitis</td>
<td>IA 6</td>
<td>266.5</td>
<td>6</td>
<td>28</td>
<td>756</td>
<td>30</td>
</tr>
<tr>
<td>Intestinal nematode infections</td>
<td>IA 14</td>
<td>243.4</td>
<td>7</td>
<td>38</td>
<td>58</td>
<td>34</td>
</tr>
<tr>
<td>Perinatal conditions</td>
<td>ID</td>
<td>199.1</td>
<td>8</td>
<td>5</td>
<td>1,750</td>
<td>6</td>
</tr>
<tr>
<td>Measles</td>
<td>IA 5 d</td>
<td>176.0</td>
<td>9</td>
<td>4</td>
<td>19,923</td>
<td>5</td>
</tr>
<tr>
<td>HIV</td>
<td>IA 3</td>
<td>168.1</td>
<td>10</td>
<td>9</td>
<td>7,020</td>
<td>11</td>
</tr>
<tr>
<td>Intentional injuries</td>
<td>III B</td>
<td>48.5</td>
<td>17</td>
<td>7</td>
<td>14,572</td>
<td>7</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>IA 1</td>
<td>57.2</td>
<td>15</td>
<td>8</td>
<td>9,434</td>
<td>9</td>
</tr>
<tr>
<td>Malignant neoplasms</td>
<td>II A</td>
<td>25.8</td>
<td>25</td>
<td>10</td>
<td>5,866</td>
<td>13</td>
</tr>
<tr>
<td>Neuro-psychiatric conditions</td>
<td>II E</td>
<td>49.3</td>
<td>18</td>
<td>26</td>
<td>810</td>
<td>8</td>
</tr>
<tr>
<td>Maternal conditions</td>
<td>IC</td>
<td>65.3</td>
<td>13</td>
<td>11</td>
<td>5,530</td>
<td>10</td>
</tr>
</tbody>
</table>
Research capacity building: Nouna Health Research Center

Building 1

Scientific Board

Satellite imaging

Library

Computer Lab

Parasitology lab
Research capacity building?

- Reflex: capacity building = teaching
- Research environment as important
  - Physical: internet access, libraries, computer labs, medical labs
  - Social: Career structure, incentives, valuation

CRUCIAL:
- LONG TERM CORE FUNDING
- OVERHEADS IN PROJECT BUDGETS
Cosmopolitan: 18% of students are international

- Graduate:
  - for foreign *medical* students in Germany: short courses, diploma course BMZ, DAAD, INWENT

- Postgraduate:
  - Short courses (refugee health, drug management, leadership, etc.)
  - Short course for German health expert going abroad (BMZ, GTZ)
  - M.Sc. Courses (3)
  - Doctoral training (70% from dev. Countries)
<table>
<thead>
<tr>
<th>Degree</th>
<th>awarded by</th>
<th>taught at</th>
<th>funded by</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.Sc. Community Health &amp; Health Management</td>
<td>HD</td>
<td>HD</td>
<td>State, DAAD</td>
</tr>
<tr>
<td>Master in Public Health</td>
<td>Dar es Saalam</td>
<td>Daress. Univ.</td>
<td>GTZ</td>
</tr>
<tr>
<td>M.Sc. Health Economics</td>
<td>HD</td>
<td>Hanoi</td>
<td>SIDA-WBank</td>
</tr>
<tr>
<td>M.Sc. Intl. Health</td>
<td>HD</td>
<td>HD</td>
<td>WBank</td>
</tr>
<tr>
<td>40 Iranian health experts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modular postgraduate E-learning M.Sc.</td>
<td>HD and partners</td>
<td>wwwHD VN TZ</td>
<td>DAAD, BMBF</td>
</tr>
</tbody>
</table>
Recommendations & perspectives

• Defragment funding for R@T with the south
  – Bundle funds and organization (SIDA SAREC) of BMZ, BMBF, State M. of Research, and key ministries: health, education,…

• Allow German universities to compete internationally:
  – Tuition
  – Overheads
  – Fund e-learning for degree courses

• Allow partners in the South to compete internationally:
  – Provide long term core funds for a few partner centers of excellence (“Grundausstattung”)

• Fund joint projects: policy intervention (BMZ) and research (e.g. DFG)
A win-win situation
Added value of cooperation

• For partner in South:
  – Sharing of teaching and research methods
  – Formal degree training
  – Access to full cost tuition funding
  – Research networks/consortia
  – Infrastructure for teaching and research

• For Heidelberg
  – Expertise of to understand global problems
  – Intervention-research capability
  – Link between biomedical and health system research
  – Export of teaching
Does the Dept. of Trop. Hygiene and Public Health have an overall strategy

Yes
Lessons learnt - perspectives

- Research and higher education to integrate into BMZ
- DAAD should fund tuition for postgraduate training
- Support e-learning and innovative cooperation
- Improve database to assess, understand and monitor poverty dimension
- Overheads for research, core funding for partners
- Overcome German fences: development assistance-research-teaching-health: BMZ-BMBF/DFG-LAND-BMG
Research, teaching and service: do they really mesh?

• Yes, but
• Institutional and funding barriers, particularly when meshing is attempted in the south:
  – “drawer thinking” in the North
  – reflex: developing countries=development aid
Need for research in DCs!

- Problems and solutions are universal, but extremely context sensitive
  - Malaria
  - Health insurance
  - Environmental change
- Ownership crucial for policy impact
- North: methods, infrastructure
- Research, teaching, policy integration