

Perspective on Diagnostic and Research in Cambodia

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Cambodia Population and Development at a glance



Became a lower middle-income economy in 2015
1994-2015

7.6% Cambodia's average growth rate - 6th highest in the world

***Population: 16.25 million (est. 2018)**

***Male to Female ratio: 95.21: 100**

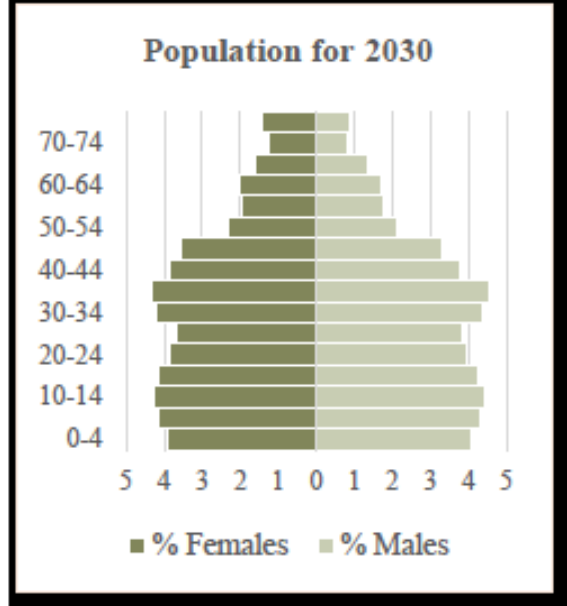
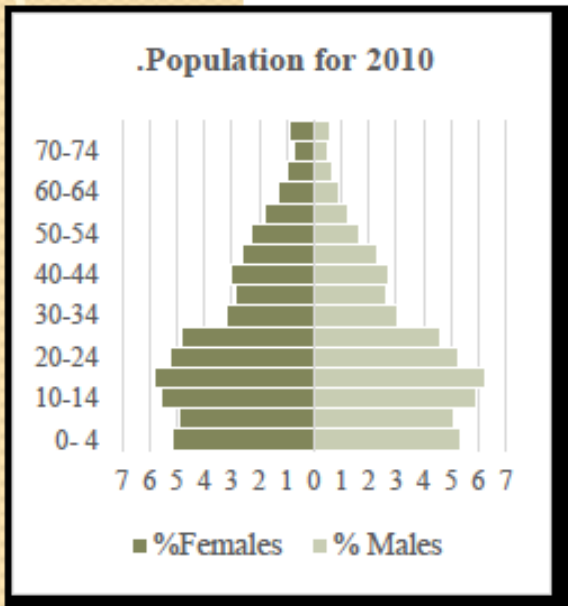
***Life Expectancy at birth: 70 y**

Number of Cambodians living in poverty dropped

2007 **47.8%** 2013 **13.5%**

Millennium Development Goals

- Maternal mortality ratio cut to a sixth (1990 to 2015)
- Nearly universal primary education enrolment
- Reduced HIV/AIDS incidence rate by 82% since 2000



Access to Health Services

- Significant increased care seeking at both public and private providers for all population groups, rising from 84% in 2007 to 98% in 2013 (Ref. HSP3)
- Quality improvement of health services has been guided by the National Policy for Quality in Health
- **Challenges to the health system still exists:**
 - Inadequate quality in health services in both public and private
 - Limited resources and under-staffing
 - Limited **Diagnostic Capacity**
 -

Source HSP3 (2016-2020)



Current situation of diagnostic laboratory in Cambodia

Public laboratories: approx. 100 (CPA, NH, NI)

Private laboratories: 38 (in 2015)

Table 3-2 Statistics of private health providers by types of services

Type of services	2009	2010	2011	2012	2013	2014	2015
Nursing care room	758	1252	1505	1733	1630	1754	3392
Pregnancy care room	242	331	427	485	520	506	1030
Physiotherapy room	5	12	19	21	22	20	13
Consultation Cabinet	2268	2516	2473	2640	2768	2732	2891
Dental Consultation	284	313	318	368	411	419	758
Dental Clinic	29	26	33	36	39	38	41
Esthetic/Beauty Center		2	6	6	8	10	12
Medical laboratory	29	25	20	23	27	27	38

Governance of medical laboratory services

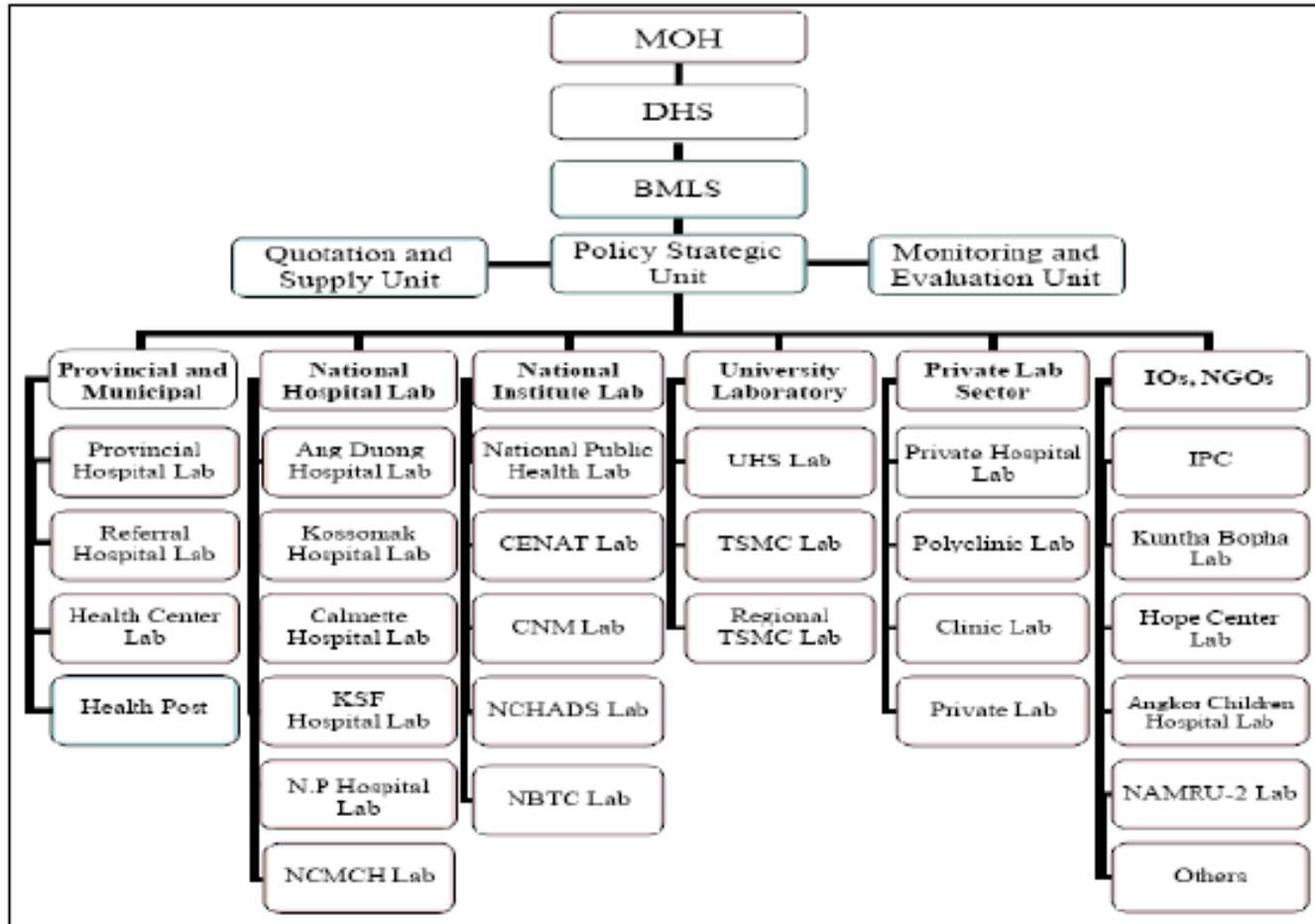


Figure 3: Organization of Medical Laboratory Services

Source: IQLS assessment report 2013



Diagnostic capacity

- National institutions (NIPH, CENAT, CNM, NCHADS, SHCH, UHS), National and Provincial hospitals are equipped with microbiology laboratory.
- Cambodia is one of the few countries in the region with access to most confirmatory laboratory tests and extensive pathogen characterization at the national level

Laboratory	Level of operation (following average security standards)	Comments
NIPH	BSL2+	Not functional yet. Will be QI, 2014
IPC	BSL3	3 separated rooms. Commissioning and maintenance performed by IPC
CENAT	BSL2+	Clearly below the standards. No gauge available. Unclear procedures
Kampong Cham TB laboratory	BSL2+	Fully functional and equipped. Supported by MSF
Battambang TB laboratory	BSL2 only	Regular BSL2 laboratory with access restriction. No negative pressure, no specific security
UHS	BSL2+	

Source: IQLS assessment report 2013



Accredited laboratory

- ISO 15189, 2012
 - IPC (since Dec 2018, Cofrac* France)
 - NIPH (since Feb 2019, IQMH*, Canada)
 - ISO 9001, 2015
 - Central Media Making Laboratory, UHS (since Feb 2019, TUV Rheinland*, Germany)
 - ...
- ✓ No accreditation body available in Cambodia (?)



Ways forward for laboratory diagnostic

- **To improve the quality of service delivery and equity in the distribution of health services**
 - QUALITY of Diagnostic (keeping ways towards ISO accreditation)
 - Strengthen infrastructure
 - HR
 - Secure funding
 - Develop and strengthen Regulations for laboratories (licensing...)



Current situation on **health research system** in Cambodia

1. Stewardship and governance
2. Financing
3. Capacity building
4. Knowledge generation
5. Knowledge utilization

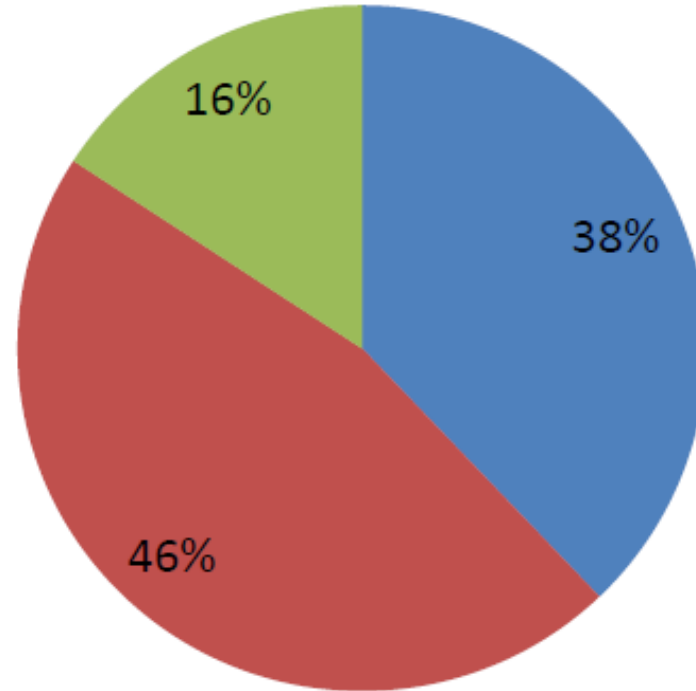


Stewardship and governance

1. Research culture in Cambodia – at early stage
2. No data on health impact and potential economic benefits of health research
3. To whom researchers and research institutions are accountable for?
4. No National Health Research Agenda
5. No research management policy



Institutions Submitted Research Protocols to NECHR in 2012

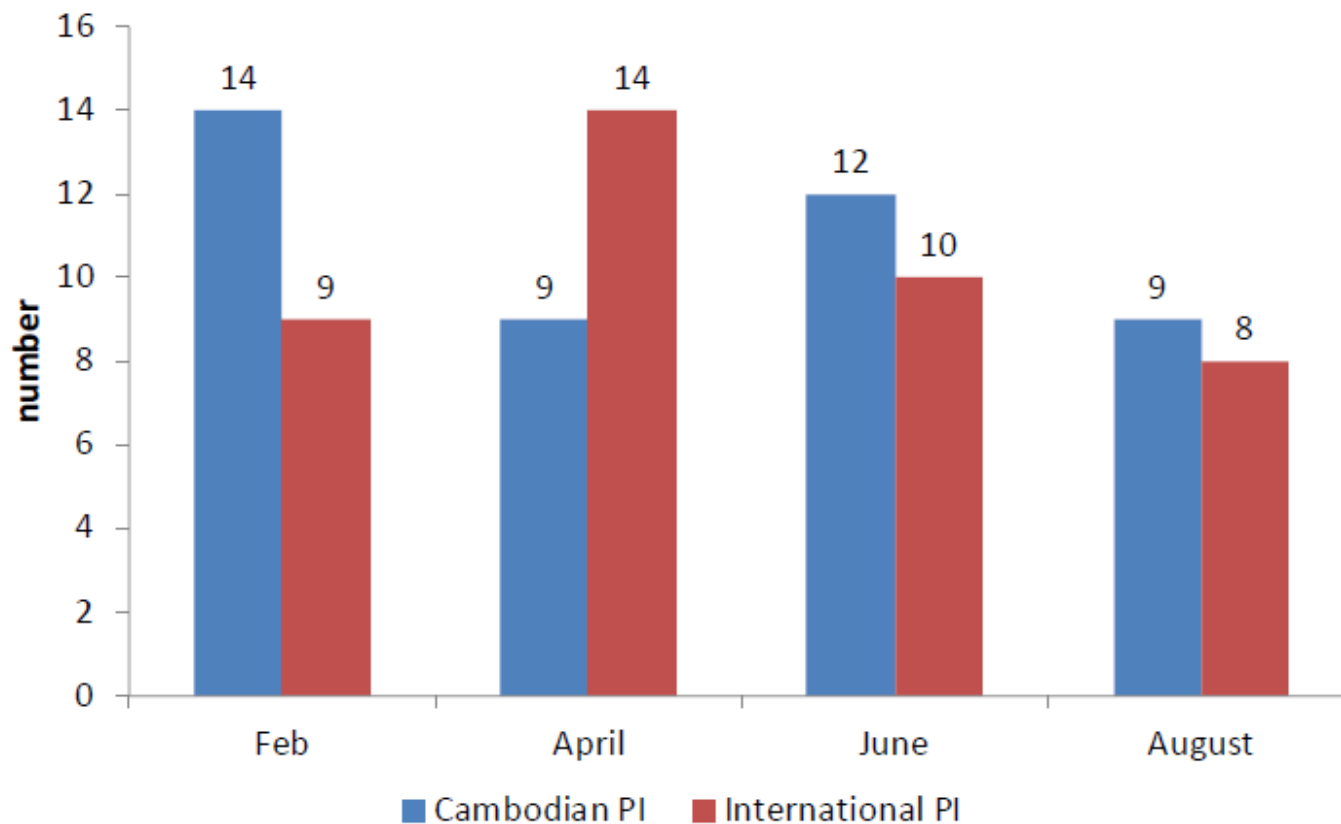


■ Government Institution ■ NGOs/IOs ■ Private researcher

Source: presentation of Pr. Saphonn V.



Nationality of Principle Investigators Submitted Protocols to NECHR in 2012



Note: PI who had multiple proposals was counted only once in each full review board meeting

Source: presentation of Pr. Saphonn V.

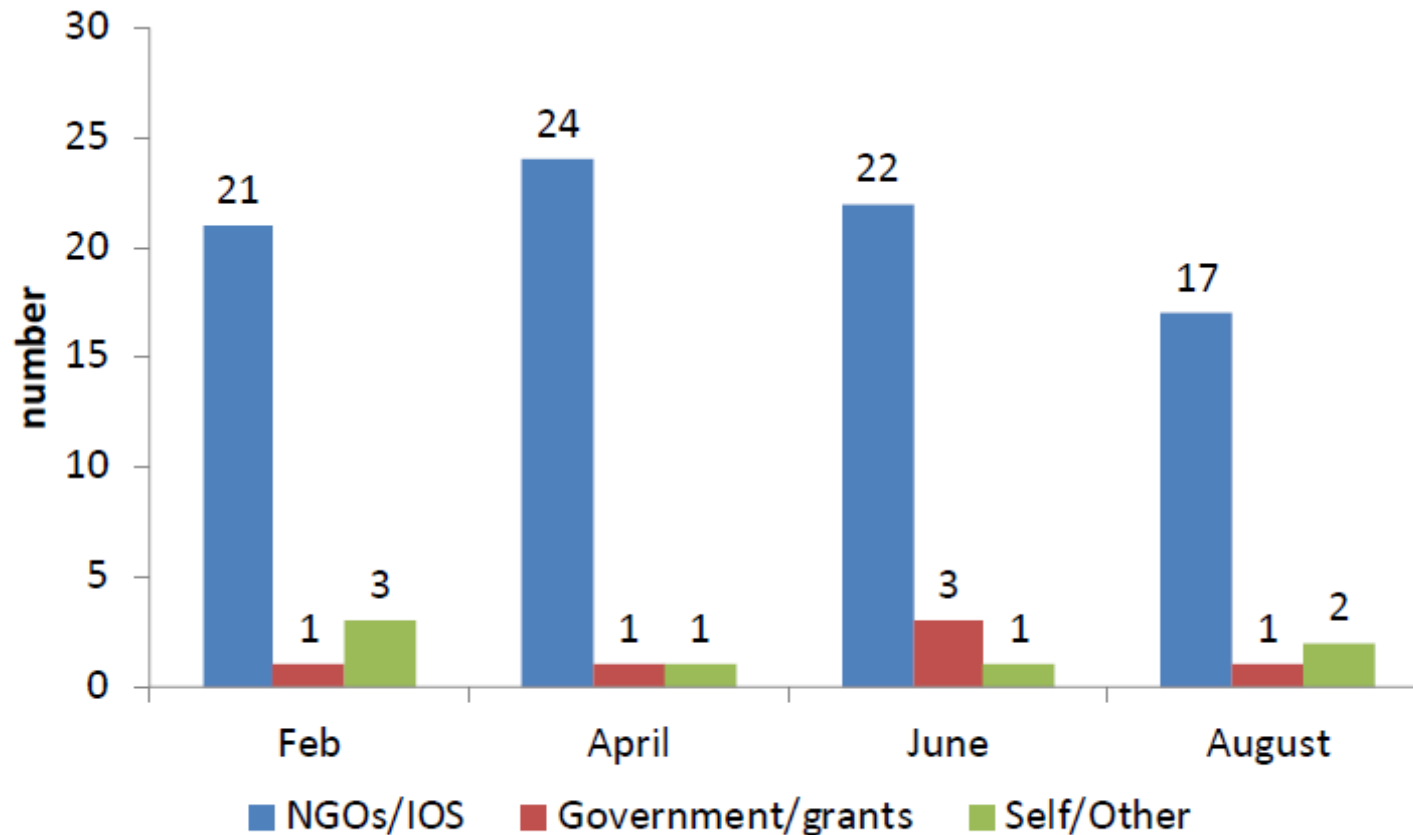


Financing

- Role of public, private, foreign, local funders
- Monitoring for expenditure on health research
- Gaps in research activity due to lack of funding



Funding Sources of Research Reviewed by NECHR in 2012

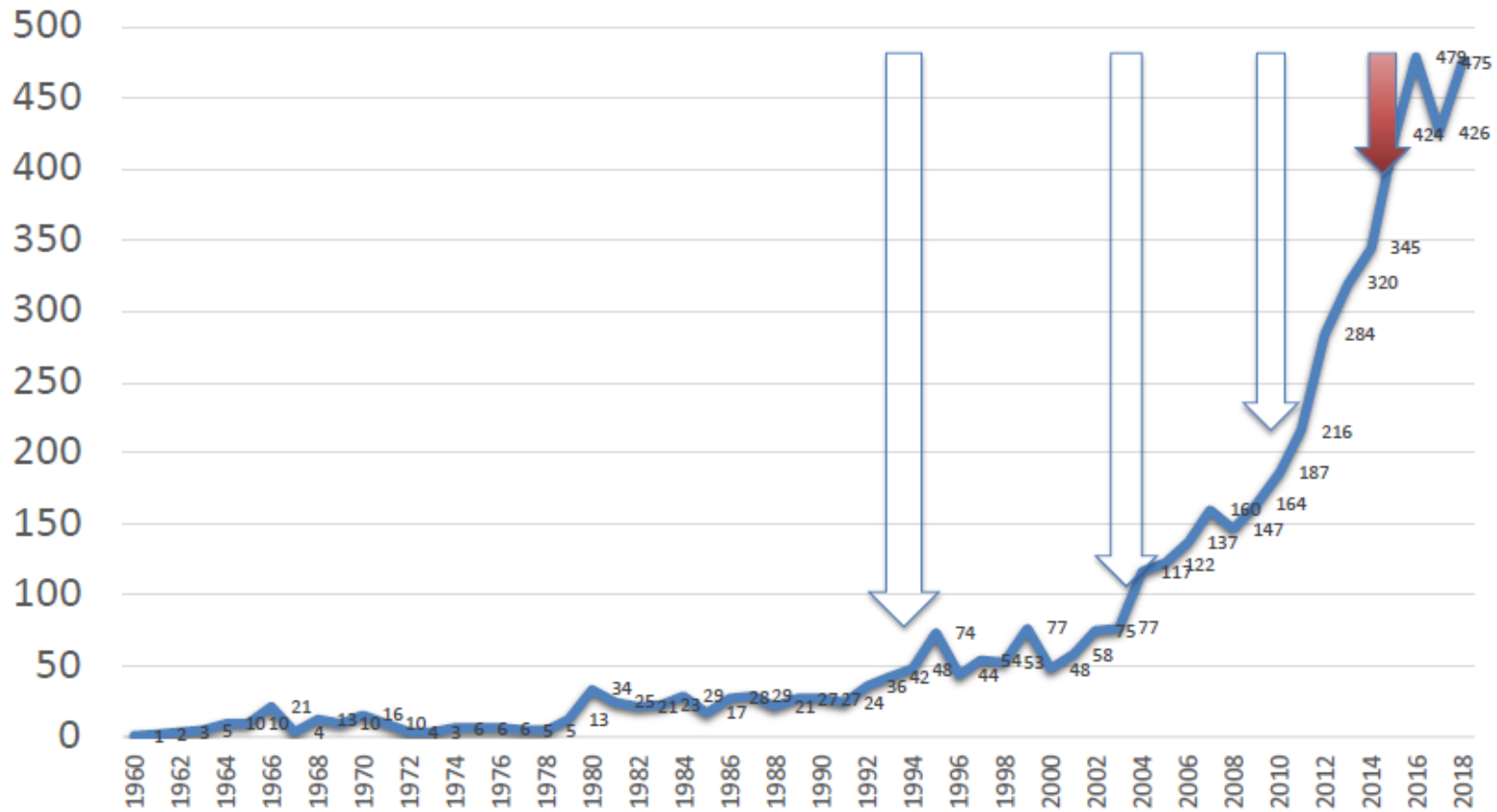


Note: some investigators did not disclose their source of research funding

Source: presentation of Pr. Saphonn V.



Number of Published Peer Reviewed Articles (Pubmed)



Capacity building

- Most of the research training are done at the universities and national institutes
- Some of research projects are conceptualized abroad, conduct in Cambodia at the national program/centers



Knowledge dissemination and translation

- Ability to understand the importance of research done in other country and use it towards its own health benefit.
- Research results from Cambodia are used to develop national and international guideline



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✓ Lot of research findings are still underutilized

ORIGINAL ARTICLE

Earlier versus Later Start of Antiretroviral Therapy in HIV-Infected Adults with Tuberculosis

François-Xavier Blanc, M.D., Ph.D., Thim Sok, M.D., Didier Laureillard, M.D., Laurence Borand, Pharm.D., Claire Rekacewicz, M.D., Eric Nerrienet, Ph.D., Yoann Madec, Ph.D., Olivier Marcy, M.D., Sarin Chan, M.D., Narom Prak, M.D., Chindamony Kim, M.D., Khemarin Kim Lak, M.D., et al., for the CAMELIA (ANRS 1295–CIPRA KH001) Study Team*



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Perspective for Health Research

- A national health research agenda is needed
- Promoting research to response more to local agenda with more international collaboration
- Promote academic institutions to conceptualize and conduct research to meet country research needs
- Promote evidence base decision making through knowledge generation, translation and utilization



Thank you for your attention

