Burnet Institute
Medical Research. Practical Action.

SUBMISSION TO THE INQUIRY INTO AUSTRALIA'S OVERSEAS AID AND DEVELOPMENT PROGRAM BY

THE SENATE STANDING COMMITTEE ON FOREIGN AFFAIRS, DEFENCE AND TRADE

Summary

1. Reducing poverty in the Asia-Pacific region should continue to be the overriding mission of the Australian aid program. This is totally compatible with Australia's national interests. Moreover, the aid program should continue to afford high priority to the strategic goals of *Saving Lives* and *Promoting Opportunities for All*.

2. In addition, we strongly support the strategic goal of *Preparing for and Responding to Disasters and Humanitarian Crises*. We are disappointed that the 2013/14 budget for humanitarian and emergency response has been cut by 16% at a time when there are so many refugees in need of care, notably the 2.5 million Syrian refugees.

3. We support the submission by the *Copenhagen Consensus Center* proposing that the Australian aid program should prioritise funding for the 16 interventions found to provide the best value-for-money. We note that the top five rankings are health interventions.

4. We applaud the recent attention given by the aid program to child nutrition. We recommend that child nutrition be treated as a high strategic priority by the Department of Foreign Affairs and Trade (DFAT). Eliminating child undernutrition will significantly contribute to *Promoting Opportunities for All* through improved school outcomes.

5. In addition to funding cost-effective interventions, the Australian aid program should help strengthen health systems in the Asia-Pacific region through supporting the six "building blocks" described by the World Health Organization (WHO) and health systems research.

6. We propose a major scaling up of support by the Australian aid program to health and medical research that aims to address the major health issues in the Asia-Pacific Region and provide an evidence base for effective Australian aid. This was recommended by the Independent Review of Aid Effectiveness in 2011 but has yet to be implemented. We propose as a model the public-private partnership *Grand Challenges Canada*.

7. We recommend the continuation of three initiatives that have contributed to capacity-building, innovation and knowledge generation: The Australian Development Research Awards Scheme, the Australian Awards Fellowships, and the Knowledge Hubs for Health. The ANCP Innovations Fund should also be a permanent component of the aid program.

About the Burnet Institute

Our mission is to achieve better health for poor and vulnerable communities in Australia and internationally through research, education and public health. While our headquarters are in Melbourne, the Institute has offices in Papua New Guinea, Lao PDR, and Myanmar, as well as public health programs and research in China, India, Indonesia, Kenya, South Africa, Sri Lanka, Timor Leste, Vanuatu, and Zimbabwe.

The Burnet Institute is unique in being both a medical research institute accredited by the National Health and Medical Research Council and a development NGO fully accredited by the Australian aid program. Underpinning our research focus are cross-institute health themes which bring together our diverse staff skills to share their research and technical expertise across: (i) Infectious Diseases (including malaria, tuberculosis, HIV and viral hepatitis); (ii) Immunity, Vaccines, and Immunisation; (iii) Maternal and Child Health; (iv) Alcohol, Other Drugs and Harm Reduction; (v) Sexual and Reproductive Health (including HIV prevention, treatment, and care); and (vi) Young People's Health.

The Institute has an annual turnover of approximately $40 million, of which more than one-half supports our overseas programs.

Response to the terms of reference

We will focus in this submission on the first two terms of reference.

1) *Australia's ability to deliver aid against stated policy objectives and international commitments*
2) *Australia's ability to maintain its international development priorities, including sectoral, regional, bilateral and multilateral international relationships;*

We believe that reducing poverty, with a focus on equity, in the Asia-Pacific region should be the over-arching mission of the Australian aid program. While improvements in Fair Trade, strategic investments in economic growth industries and strengthened financial governance may lead to improved macro-economic indicators, they will not necessarily benefit the very poor. The aid program has a unique opportunity to address some of the key factors constraining equitable economic growth: poor health (often associated with catastrophic medical expenses), lack of education, and gender inequality. This is clearly in Australia's national interests.

We support the five strategic goals of the Australian aid program as outlined in the 2012 policy document *An Effective Aid Program for Australia: Making a real difference — Delivering real results*.

Given our particular expertise in health, we strongly endorse the goals of *Saving Lives* and *Promoting Opportunities for All*. We urge that these goals remain fundamental to the purpose of the Australian aid program. In addition, we support the strategic goal of *Preparing for and Responding to Disasters and Humanitarian Crises.* We are disappointed by the 16% cut to the 2013/14 budget for Humanitarian and Emergency Response announced by the Government, especially at a time when the global number of refugees is rising alarmingly, including as a result of the civil war in Syria. Although our institute does not directly provide emergency relief, our staff has been seconded to international organizations to develop public health surveillance systems following a number of disasters, notably through the Global Outbreak and Response Network.

To be effective, the aid program needs to continually strive to base initiatives on solid evidence of effectiveness. Moreover, the aid program must continue to strengthen its capacity for robust (and independent) monitoring and evaluation. Therefore, the Office of Development Effectiveness is a critically important component of the aid program and must continue to have operational independence and relevant expertise.

We note that the expert panel of leading economists convened by the Copenhagen Consensus Center ranks ten health interventions among the 16 most cost-effective solutions to the major global development challenges. The top five value-for-money investments are fighting malnutrition; malaria medicines; expanded childhood immunisation coverage; deworming treatments for children; and expanded TB treatment. We believe that a focus by the Australian aid program on efficiently delivering some if not all of the highly ranked health interventions would have a major impact on the health and well-being of populations in partner countries, and contribute to poverty reduction.

We particularly welcome the recent attention given by the Australian aid program to reducing maternal and child undernutrition as evidenced by the formation of the multi-sectoral Nutrition Working Group and Australia's recent membership of the global Scaling Up Nutrition Movement, that was launched in 2011 by then US Secretary of State, Hilary Clinton. We urge DFAT to develop a high-level strategy to address hunger and malnutrition in the Asia-Pacific Region, which has the highest rates of child undernutrition in the world. This strategy should also address the rising rates of adult overweight and obesity in the region.

In our experience, the delivery of "vertical" health interventions, as described by the Copenhagen Consensus Center, is unlikely to be effective and sustainable without the coordinated mobilization of all aid actors, including civil society, and two other critical actions:

- Health systems strengthening, and
- Intervention and operational research

Health systems strengthening

"Public health [today] enjoys commitment, resources, and powerful interventions... but the power of these interventions is not matched by the power of health systems to deliver them to those in greatest need, on an adequate scale and on time... This arises, in part, from the fact that research on health systems has been so badly neglected and underfunded... In the absence of sound evidence, we will have no good way to compel efficient investments in health systems."
Dr Margaret Chan, Director-General, World Health Organization, Beijing, China, 29 October 2007.

If the delivery of evidence-based interventions by the Australian aid program is to be effective, support needs also to be given to what the World Health Organization describes as the six building blocks of a functioning health system:

Good **health services** are those which deliver effective, safe, quality personal and non-personal health interventions to those that need them, when and where needed, with minimum waste of resources.

A well-performing **health workforce** is one that works in ways that are responsive, fair and efficient to achieve the best health outcomes possible, given available resources and circumstances (i.e. there are sufficient staff, fairly distributed; they are competent, responsive and productive).

A well-functioning **health information system** is one that ensures the production, analysis, dissemination and use of reliable and timely information on health determinants, health system performance and health status.

A well-functioning health system ensures equitable access to essential **medical products, vaccines and technologies** of assured quality, safety, efficacy and cost-effectiveness, and their scientifically sound and cost-effective use.

A good **health financing** system raises adequate funds for health, in ways that ensure people can use needed services, and are protected from financial catastrophe or impoverishment associated with having to pay for them. It provides incentives for providers and users to be efficient.

Leadership and governance involves ensuring strategic policy frameworks exist and are combined with effective oversight, coalition-building, regulation, attention to system-design, and accountability.

Intervention and operational research

The Government's response to the 2011 Independent Aid Effectiveness Review gave in-principle support to "more aid funding for research by Australian and international institutions, particularly in... medicine". We certainly welcomed the inclusion of medical research as a potential "flagship" of the aid program, as proposed in the aid effectiveness review report. This was followed in 2012 by the release of a Medical Research Strategy. While the strategy focuses appropriately on conditions that cause a high burden of disease in the Asia Pacific Region, very few resources have yet been allocated to medical research within the Australian aid program.

Global trends in development assistance, as expressed in declarations at aid conferences in Paris, Accra, and Busan during the past decade, necessitate that Australia share responsibility for development outcomes with partner countries in the region. Therefore, any strengthening of medical research within the aid program should actively foster partnerships between Australian institutions and counterparts in aid recipient countries.

There is certainly now a great opportunity to incorporate more medical and public health research into the aid program in a manner that leverages the impact of Australian aid efforts. One example elsewhere that may be relevant to Australia is **Grand Challenges Canada**, which is a public-private partnership between various departments of the Government of Canada (including the Department of Foreign Affairs, Trade, and Development) and the Gates Foundation (http://www.grandchallenges.ca/).

Examples of research

We provide two examples of research that would significantly contribute to effectively addressing two major health issues in the Asia-Pacific region – malaria and tuberculosis:

1. Malaria

Malaria is a potentially fatal disease which threatens over 2 billion people each year in the Asia-Pacific Region - approximately 67% of the world's total population of people at risk of malaria. According to the World Health Organization (WHO), there are more than 200 million malaria cases globally each year, with more than 30 million cases and 42,000 lives lost in the Asia-Pacific region in 2010 alone. More than 90 per cent of these deaths were in India, Myanmar, Bangladesh, Indonesia and Papua New Guinea.

The Australian aid program has generously supported the current global Roll Back Malaria strategy, in particular by supporting malaria elimination in Solomon Islands and Vanuatu. However, the strategy will not be effective unless the following constraints are overcome through medical research[1]:

Diagnosis: There is no simple effective test to diagnose drug-resistant malaria. Instead, diagnosing resistance relies on a 100-year old technique, cannot be done in a single encounter and requires skilled staff.

Treatment: There are currently no first-line drugs to replace artemisinin in the event of resistance. The emergence of artemisinin resistance could undo much of the progress of the last decade. Yet resistance is highly possible – even likely - given that the malaria parasite has learnt to evade every first-line malaria drug ever developed.

Surveillance: We currently do not have the tools to effectively conduct surveillance of drug-resistance. The absence of molecular markers of resistance is a serious barrier to widespread surveillance and rapid detection of artemisinin resistant strains.

Vector control: Resistance is emerging to the key insecticides for bed nets and indoor spraying, and we currently have no replacement insecticides. Resistance to insecticides is already a problem in India, Indonesia, Myanmar, Vietnam and China.

Elimination of malaria: as P. Falciparum malaria decreases, P. vivax malaria - which is more difficult to control - becomes more prominent. P. vivax can only be eliminated by administering primaquine which can produce serious side-effects in patients who have severe deficiency of a certain blood enzyme. The development of a low-cost and accurate rapid diagnostic test for this deficiency would be an important advance for the control of vivax malaria and the eventual elimination of malaria, especially in countries like Solomon Islands and Vanuatu where this enzyme deficiency is relatively common.

2. Tuberculosis

There are more than 9 million new cases of tuberculosis (TB) every year worldwide, and incidence is declining at a rate of less than 1% per year. According to WHO, approximately 2 million people die each year mainly in communities in underdeveloped countries, such as Papua New Guinea (PNG). Early and rapid detection of disease particularly in regions with limited resources for diagnosis and treatment are critical for patient survival. The gold standard for detection requires culture which can take up to 6 weeks. A rise in multi-drug resistant (MDR) TB strains globally and in the Asia-Pacific Region not only increases the difficulty of treatment, but places a greater burden on TB control programs.

Urgent Research Needs for TB

- Develop a new, accurate point-of-care diagnostic test for active pulmonary TB;
- Develop new diagnostics to detect drug resistance;
- Develop a new vaccine that effectively prevents all forms of TB, especially pulmonary TB;

[1] These priorities were developed by the Australia-based Global Health Research Alliance, which includes the Burnet and Nossal Institutes, Policy Cures, Médecins sans Frontières Australia, CSIRO, World Vision, and University of Sydney.

- Develop new therapeutic agents that are safe, effective, and affordable, especially for MDR TB;
- Evaluate the optimum tuberculosis treatment using existing drugs for HIV co-infection.

Other supporting initiatives

A number of innovative initiatives have been funded in recent years by the Australian aid program and should continue to be supported, if not expanded:

1. **Australia Awards Fellowships:** These short-term and long-term fellowships have been a valuable mechanism to build capacity in key areas of development and to forge partnerships between Australian institutions and counterparts in partner countries. They have allowed the Burnet Institute to develop long-term relationships with public health and research practitioners in Afghanistan, Nepal, China, PNG, Solomon Islands, Fiji, Laos, Indonesia, Sri Lanka, Mongolia, Myanmar and Eastern Africa.

2. **Australian Development Research Awards Scheme:** These have provided valuable support for applied research on important development issues identified by partner country counterparts and to build research capacity in those countries. They have played an important role in building the body of evidence to support effective development practices.

3. **Knowledge Hubs for Health:** The four Knowledge Hubs supported in the past by the Australian aid program provided a key role in knowledge generation, synthesis, and analysis that directly supported international best practice in Australian-funded health development programs. As well as one hub focused on maternal and child health, other hubs contributed to building the evidence base in several of the building blocks of health system strengthening: health financing and planning; health workforce development; and health information systems.

4. The **ANCP Innovations Fund** should be a permanent component of the aid program. This has been an excellent mechanism to develop and pilot innovative partnerships, innovative practice, and innovative approaches to aid effectiveness.

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