

## Enhancing Intersectoral Collaborations: Winning the Fight against Vector-borne Diseases

The epidemiology of vector mosquito-borne diseases such as malaria and dengue defines the interface between mosquito to human, and that between human to mosquito, as well as multiple economic, social, cultural, political and behavioral factors that expose humans to the mosquito bite, resulting in infection. Environmental factors such as suitable mosquito breeding sites, tropical climate and topography, increase mosquito density and man biting behavior resulting in infection and transmission. Different interventions to kill vector mosquitoes (adulticides and larvicides), prevent the mosquito bite (insecticide treated nets, curtains, repellents), diagnosis (rapid tests) and treatment (ACTs for malaria), have been implemented, and have been shown to reduce morbidity and mortality particularly for malaria. But can disease control be realized and sustained? Can disease elimination and prevention of re-introduction be achieved?

A better understanding of the epidemiology and control of vector-borne diseases clearly shows that the responsibility is not with key affected populations and the health sector only, but with all those sectors and stakeholders that impact on the disease, be it at the local or national levels. This is the basis of creating and implementing intersectoral collaborations (ISCs) for vector-borne diseases. An article published in this issue of the journal <sup>1</sup> was able to draw together and analyze multicountry experiences on ISCs for malaria and dengue. The ISC structure, goals, inputs and outputs as well as outcomes of existing models were described. Gaps in planning and implementation were noted, and recommendations were added. The resulting data can be used to develop an enhanced ISC framework for more effective implementation and success.

The Philippines has had quite a number of malaria control initiatives built on bilateral partnerships with several agencies – USAID, USNAMRU, WHO, JICA, AusAID, NGOs, various private corporations and religious organizations, as well as the national military that have contributed in disease control.<sup>2</sup> Notable are the Palawan and Agusan del Sur experiences. In 1999, the Palawan provincial government and Pilipinas Shell Foundation, as its corporate social responsibility, established *Kilusan Ligtas Malaria* to control malaria in the island.<sup>3,4</sup> The program's multisectoral and social mobilization strategies that have been adopted by the Global Fund have resulted in impressive decline of malaria cases and deaths, even to this time. High social capital may ensure the sustainability of these strategies.<sup>5,6</sup> In 1995, Agusan del Sur, another malaria-filled province, implemented the project “Implementation and Evaluation of a Self-Sustaining Community-Based Malaria Control Program in the Philippines” through the Australian International Development and Assistance Bureau. Initially a collaborative project of RITM and DOH-Malaria Control Services, it was gradually devolved to the province of Agusan del Sur, which created its Provincial Technical Advisory Committee, Provincial Management Team and Community Trust Fund to implement and sustain malaria control.<sup>7</sup> Last year, Agusan del Sur was declared malaria-free.

Being successful in the fight against vector-borne diseases like malaria and dengue may not be elusive after all. Enhanced ISCs as discussed in the article could be the winning formula in this fight.

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