



## Healthy wetlands for healthy people: how wise management of wetlands and water can contribute to improved human health and poverty reduction

Health is a key issue in many rural communities and a priority for many poor people in the Lower Mekong Basin. Illness, disability and death are major factors in poor people's poverty and vulnerability. Health indicators in many rural areas of the Mekong illustrate the extent of the problem – in terms of child and infant mortality, prevalence of water-borne diseases and malaria, lack of access to safe drinking water and sanitation and malnutrition. Yet at the same time, many people are used to living with chronic ill-health and being exposed to health risks.

Poor health is one of the major causes and characteristics of being poor in rural communities. For rural people, dealing with health problems whether through treatment or loss of household labour due to temporary disability or death can put such a strain on household economics that they are forced into poverty. Reducing vulnerability to poor health can make a dramatic and lasting contribution to households and local economics. Vulnerability to poor health can also be a factor in unsustainable resource use of rural communities. Addressing people's priority health needs through empowering individuals and communities by building their capacity to take action to manage their human resources to improve their health and well-being can contribute to sustainable natural resource management.

Poor nutrition, particularly among pregnant women and young children can lead to poor health throughout people's lives. Water-borne diseases and malaria are prevalent throughout rural areas in the Mekong and are major causes of illness and death particularly among children and pregnant women. Lack of access to clean drinking water and good sanitation is a common cause of child mortality and illness. All of these health issues are related to management of wetlands and water.

The Mekong Wetlands Biodiversity Conservation and Sustainable Use Programme (MWBP) is committed to sustainable management of wetland resources for poverty reduction and sustainable livelihoods. Addressing some of the most important health issues particularly influencing positive health-seeking behaviours of rural communities has been a key element of MWBP strategy for promoting sustainable livelihoods.

### How the environment sector has become interested in health

The environment sector has become increasingly aware of the linkages between poverty and environment. Most of the interest in poverty from the wetland sector is in recognition that degradation of wetlands and water resources will have negative impacts on the people that depend on these resources. These concerns can be summarised:

- Loss of wetland functionality reduces the availability of wild food sources. These food sources are of particular importance for poorer households, and provide a safety-net in times of crisis in countries where social welfare is limited.
- Changes in the hydrological regime – whether through water management schemes or climate change, reduce the availability of water and wetland resources, but also increase the prevalence of some diseases

As well as preventing further degradation of threatened resources, managing wetland and water resources can make an important contribution in reducing poverty, particularly through generating food security and improved nutrition, providing drinking water and sanitation, and through reducing the incidence of water borne diseases.

A JOINT UNDP - IUCN - MRC GEF-FUNDED PROGRAMME



CAMBODIA



LAO PDR



THAILAND



VIETNAM





### **How the health sector has become interested in natural resources**

While the environment sector has become more interested in a range of livelihood issues including health, the health sector has also become more interested in natural resource management issues. Recognising the fundamental importance of natural resources for providing food and water, and the importance of nutrition and clean drinking water for human health, there is growing interest in the health sector of how natural resource management can contribute to health agendas. Improving health service delivery needs to be supported by a healthy ecosystem that provides the natural resources that can help generate improved human health.

The environment is the source of essential elements for traditional health modalities especially the use of medicinal plants. Degradation of forests and diminishing biodiversity of plants and animals cause the loss of these sources of rich traditional practices especially among remote communities and ethnic communities without access to medical services.

The environment is also an element vital to people's spirituality and well-being. Rivers, lakes, mountains, trees are people's symbols of living harmoniously and healthily. Fresh air, clean water, abundant wildlife provide people health and well-being – or as expressed in the Lao saying, '*yu dee, kin dee*', literally meaning "live well, eat well".

### **1. Wetlands for food security and improved nutrition**

Rural communities are largely dependent on wetland resources for food – whether from cultivation of rice, harvesting a rich variety of aquatic resources. Improving food security and nutrition can have huge implications for people's health.

Food security and nutrition are not necessarily the same. Agricultural policy in developing countries is framed in terms of addressing poverty. In many cases, such as Lao PDR, poverty is largely

defined in terms of rice food insecurity. This leads to strategies for increasing the area of land under cultivation, improving irrigation supply and management, and extension of new agricultural practices. All of these approaches unless properly managed will have implications for availability, equitable accessibility, sustainability and productivity of wild aquatic resources. It is important to both increase agricultural productivity while at the same time maintain or increase the productivity of aquatic resources that are part of the same natural system.

Important equity issues must be considered. Poor people are more dependent on wild aquatic resources to meet their food and nutritional needs. As poor people are more dependent on such common property resources and less access to private land, they are less likely to benefit from land-based development strategies.

While it is necessary to increase rice production to meet food security this alone is not adequate to improve nutrition. Nutritional status depends on the quality and availability of food sources. Aquatic resources provide important sources of nutrition that cannot be easily replaced. In many cases aquatic resources constitute the main coping strategy for periods of rice shortage. While these strategies for addressing regular rice shortages are well established, there are no coping strategies for addressing shortages in aquatic resources.

### **2. Wetlands – essential for clean drinking water and sanitation, and reducing water borne disease**

Most rural people in Lower Mekong Basin depend on natural water supplies for drinking water. These may be from rivers, streams or ponds. Ensuring that these water resources are used in such a way as to be safe for consumption, for example through boiling and use of filters, can reduce prevalence of water borne diseases and diarrhoea. Additionally water supplies from wells to extract groundwater can provide sources of clean and accessible drinking water.



While it is essential that safe drinking water supplies are provided, the long-term sustainability of these water supplies depends on the viability of the ecosystems that generate the water. Wetland resources are essential components of the water ecosystem. Ensuring their sustainability is essential for ensuring the sustainability of water supplies.

### **Summary of MWBP Health Activities**

In partnership with Health Unlimited, MWBP is undertaking a range of health interventions including:

- In-depth assessments of people's KAP on common health problems to determine the gaps that will be addressed in the health and nutrition interventions that the programme envisions to undertake. This will also be used as baseline data to measure achievement during the end of project term.
- Identification of malnourished children through monitoring of children's weight-for-age to analyse their nutritional status. This will be followed by comprehensive nutrition activities including nutrition education, family-based rehabilitation of malnourished children, food preparation demonstration, promoting food hygiene and promoting the harvesting of growing of the sources of nutrients for family nutrition.
- Promoting medical outreach services to provide free consultation on health problems, case-finding and referral to intensive medical management for malaria, TB and leprosy, immunisation of children and women, de-worming of children, pre-natal and post-natal care for women, distribution of vitamin A to children.
- Training of Village Health Volunteers to diagnose, treat and refer common diseases particularly malaria, diarrhoea and other water-related diseases
- Health education during the nights when the provincial health teams are in the village for the medical outreach. The

health education team use varied ways to convey health lessons like use video plays, posters and quizzes.

- Formulation of a nutrition education curriculum that integrates nutrition and wetlands messages and issues
- Formulation of key nutrition and wetlands messages for a wide-range of information, education and communication materials and strategies for behaviour change and policy advocacy at all levels.
- Promoting the supply of safe water resources (including wells and filters) and promoting practices to use water resources safely.