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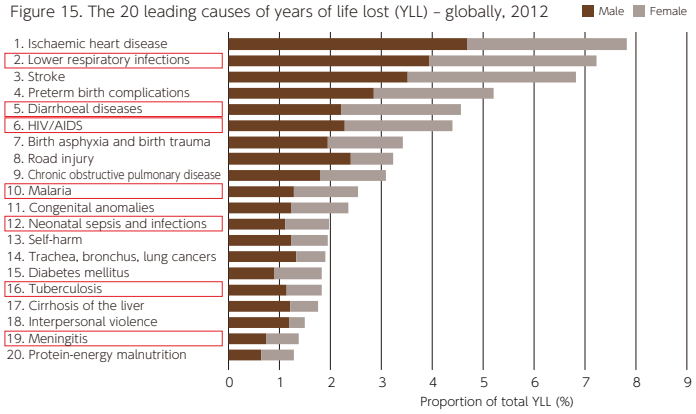
Special Feature 1

Preventing Infectious Diseases

Around the world, mortality rates from the three major infectious diseases of malaria, tuberculosis and HIV have been on the decline thanks to the concerted efforts of various institutions. However, the major causes of death for people around the world have not changed. Of the 20 leading causes of death with the greatest loss of life in years, infectious diseases account for seven of these causes. In low-income regions in particular, one third of all causes of death are related to infectious diseases.

With contributing to the sustainable development of society through business activities at the heart of its CSR, Sumitomo Chemical leveraged its strengths as a diversified chemicals manufacturer to develop and produce Olyset™ Net, an anti-malaria insecticidal mosquito net, and sells it around the world. Sumitomo Chemical is continuing research in the prevention of infectious diseases to protect the lives and health of people around the world.

Figure 15. The 20 leading causes of years of life lost (YLL) – globally, 2012



Source: World Health Organization's World Health Statistics 2014

Sumitomo Chemical's Initiatives

2001
Olyset™ Net is recommended by the WHO as world's first long-lasting insecticidal net (LLIN)

2003
Starts Olyset™ Net business

Starts local production with free licensing of manufacturing technology to A to Z Textile Mills Ltd. in Tanzania

2008
Joint venture begins hiring locals in Tanzania

2011
Starts sales in supermarkets in Kenya

2012
Sets up research laboratory in Tanzania for research and development of new products

2013
Launches Olyset™ Plus

Present
The current annual production capacity is approximately 60 million globally and 7,000 local jobs were created in Tanzania. Olyset™ Nets have been supplied in more than 80 countries so far.

Using the Power of Chemistry to Create a World without Malaria

Every year approximately 200 million people worldwide are infected with malaria and more than half a million people die annually from the disease. Malaria is an infectious disease transmitted by mosquitoes carrying the malaria parasite. Sumitomo Chemical developed Olyset™ Net, a long-lasting insecticidal mosquito net made of polyethylene resin-based fibers containing insecticide. This insecticide is gradually released onto the surface of fibers and the net retains its insecticidal efficacy even after repeated washing. Olyset™ Net was recognized and recommended for use as the world's first Long-Lasting Insecticidal Net (LLIN) by the World Health Organization (WHO). The rate of malaria infections has fallen dramatically in regions that use Olyset™ Net, proving its effectiveness.

In some regions, however, it has been confirmed that some mosquitoes are becoming resistant to existing insecticides. Advancing the technologies in Olyset™ Net, Sumitomo Chemical developed Olyset™ Plus, which also shows efficacy against malaria-carrying mosquitoes resistant to existing insecticides. We have also developed a new insecticide spray for WHO recommendation as an indoor residual spray (IRS). This product has also shown the efficacy to insecticide resistance mosquitoes as well as Olyset™ Plus.

Olyset™ Net

Worldwide Prevention of Infectious Diseases

Sumitomo Chemical has also been working on ways to combat dengue fever, which is said to afflict around 100 million people a year, of which about 20,000 people die from the disease. The WHO recommends using chemicals to treat water storage tanks where mosquitoes breed as an effective means of preventing and exterminating mosquitoes in regions where dengue fever and other infectious diseases are widespread. Using SumiLarv® 2MR developed by Sumitomo Chemical, water tanks can be treated to exterminate mosquitoes for at least six months. It is expected to play a major role in eradicating mosquitoes that carry infectious diseases.

Sumitomo Chemical also developed SumiPro™, an insecticidal space spray for commercial use that is highly effective at killing mosquitoes even in hot and dry climates. We have already started selling SumiPro™ in Singapore with plans to develop the business mainly in Southeast Asia for public health applications, such as the eradication of dengue fever.

Development of Diverse Sales Channels

To date, Sumitomo Chemical has hastened the spread of these products mainly through public institutions such as the WHO. With the aim of sustaining operations, we began selling Olyset™ Net to general consumers starting in Kenya in 2011. In addition to selling it through major distributors in Vietnam and Cambodia, Sumitomo Chemical has been developing other sales channels in the private sector, such as for selling products custom made by local residents (micro-financing projects) in a bid to help eliminate poverty, which has a strong correlation to malaria. Sumitomo Chemical is sparing no effort to expand the use of existing products while developing new technologies to prevent the spread of infectious diseases around the world.

TopValu Olyset™ Net sold at AEON stores in Cambodia

Woman selling Olyset™ Net

VOICE

Expecting Olyset™ Plus to Help in Development of Bangladesh

Mr. Sarowar Mohammed (left)

TMSS Director (Program-3)

One of the biggest events in the history of TMSS*1 was forming a partnership with Sumitomo Chemical. We sell Olyset™ Plus through hospitals and village health advisors. Our business also entails nurturing entrepreneurs to process and sell Olyset™ Plus. I believe these initiatives have consistently contributed to the improvement of public health and the prevention and elimination of malaria, a major obstacle to the development of Bangladesh.

I expect this cooperative Olyset™ Plus business with Sumitomo Chemical to be an important step in public health led development in Bangladesh, and bring smiles to the faces of the people living here, through our extensive experience and sales networks spread around the country.

*1 TMSS is one of the largest NGOs in Bangladesh. It aims to improve the livelihoods of families through support for women, and eliminate poverty throughout society. Since its founding in 1980, TMSS has engaged in a variety of projects to spur the development of society and the economy, such as micro-financing projects, fighting for women's rights, and training skilled workers.

TOPIC

Working Together to Prevent Infectious Diseases

Coral Bay Nickel Co., Ltd (CBNC), a subsidiary of Sumitomo Metal Mining Co., periodically distributes Olyset™ Net to local residents that live near its plants in the Philippines, as well as to public facilities including hospitals, schools, and gathering places. CBNC buys Olyset™ Net from Sumitomo Chemical and fabricates*2 mosquito nets and curtains. Then it distributes and installs them for free around the region as a measure to combat infectious diseases carried by mosquitoes, such as dengue fever and malaria. Sumitomo Chemical aims to help prevent infectious diseases more effectively by working with local companies and NGOs.

*2 Mosquitoes carrying dengue fever are mostly active during the daytime. In addition to mosquito netting, the WHO recommends using screen doors and curtains other than LLINs to eliminate mosquitoes.

Olyset™ Net being used locally in netting and curtains