



Arusha, 17 November 2004

## Sumitomo Chemical Co Ltd and the Olyset<sup>®</sup> net

Sumitomo Chemical is a world leader in the research and development of responsible solutions to the challenges that insect pests present to the health and comfort of mankind all over the world. One in every four employees of Sumitomo Chemical works in a research or development role; it is a statistic that has borne fruit through a rich pipeline of novel chemicals that have been introduced to a worldwide market that is hungry for new answers to some of the world's oldest problems. The Olyset<sup>®</sup> net is one such product. The technology behind the Olyset<sup>®</sup> net is revolutionary conferring the product with the ability to remain effective in controlling malaria-transmitting mosquitoes for at least 5 years without the need for re-treatment. The Olyset<sup>®</sup> net has received full approval by the World Health Organisation as a Long Lasting Insecticidal Net (LLIN).

The basic concept of the Olyset<sup>®</sup> net is both simple and revolutionary. It is simple because it is based on permethrin which is a well known and widely used long acting synthetic pyrethroid. It is revolutionary because of the advanced technology used to incorporate permethrin within the fibres that make the nets.

Permethrin is incorporated inside the raw polyethylene which is then extruded into a monofilament fibre from which the net is fabricated. The active ingredient is embodied within the fibre, from which it is slowly released over time to give the biological effect. Any insecticide that is used up or lost at the surface is constantly replenished by redistribution of the permethrin from within the fibre.

The LLIN is an essential tool for Roll Back Malaria (RBM) in achieving the targets for the significant reduction in deaths through the incidence of malaria. In response to RBM requirements Sumitomo Chemical has scaled-up production of the Olyset<sup>®</sup> net and simultaneously implemented a cost reduction program. Sumitomo Chemical has also taken the decision to transfer the technology for the manufacture of the Olyset net on a license fee free basis to interested parties in order to further increase production capacity and improve the coverage of LLINs. Technology transfer leads to further cost reductions through improved distribution and additionally creates much needed employment in the African country receiving the transfer.

The collaboration with A to Z Textile Mills in Tanzania is the first example of the Olyset<sup>®</sup> net technology transfer process. A to Z is able to produce the Olyset net from the polyethylene compound into which permethrin is incorporated, extruding the fibres and knitting and sewing the bed net. As a further step Sumitomo Chemical introduced a "Master Batch" process where a concentrated batch of permethrin and polyethylene is diluted with further polyethylene prior to extrusion of the fibres providing a cost saving in the transport of raw materials

Sumitomo Chemical is committed to further collaboration of the technology transfers to other African bed net manufacturers on a non-exclusive basis, and will continue to monitor the quality of the Olyset<sup>®</sup> net produced by such manufacturers.

Sumitomo Chemical is investigating other application of the Olyset<sup>®</sup> net technology with its partners to provide other solutions for the control of malaria carrying mosquitoes, such as coverings over windows, doors and roof eaves.

### Press contact:

Mr Hideaki Kumagai - Tel: 81-3-5543-5750 Email: [kumagai@sc.sumitomo-chem.co.jp](mailto:kumagai@sc.sumitomo-chem.co.jp)