Experts strategize on elimination of river blindness transmission in Africa

26 February 2009/ Ouagadougou, Burkina Faso – Experts from across the world began a three-day scientific consultation here Wednesday on the elimination of onchocerciasis transmission with current tools in Africa. This is the first such meeting in Africa on onchocerciasis or river blindness, a black fly-borne disease and the world’s fourth cause of infectious blindness. Onchocerciasis is endemic in 30 countries in Africa with more than 120 million people at risk of contracting the disabling and blinding disease.

The three-day meeting was triggered by emerging scientific evidence showing that it might be possible to eliminate river blindness transmission in Africa using - the Community-Directed treatment with ivermectin (CDTI) strategy - introduced in 1997 by the World Health Organization (WHO) African Programme for Onchocerciasis Control (APOCH).

The Phase I Onchocerciasis Control Programme (OCP) in West Africa launched in 1974, utilized mainly the vector control strategy involving the use of environmentally safe larvicides in fast flowing rivers where the vector breeds. Following its success, APOC was launched in 1995 with the mandate to extend the control activities to 19 other endemic African countries using a community-led system to deliver ivermectin and ensure that river blindness ceased to be a public health and socio-economic problem in the continent.

Following the remarkable success of the CDTI strategy, which now enables 117,000 APOC supported communities to treat up to 54 million people annually, and the findings of a multi-country study showing interruption of transmission in specific settings in Africa, onchocerciasis experts are discussing a paradigm shift from control to elimination of transmission of the disease.

The three objectives of the meeting are:

- To review the state-of-the-art of elimination of onchocerciasis transmission with current tools and predict the feasibility of elimination in Africa - “shrinking the (onchocerciasis) map of Africa”
- To identify critical issues for the feasibility and optimal strategies for elimination in different epidemiological settings
- To identify research needs and priorities to answer key challenges related to elimination of transmission

Professor Mamoun Homeida, who chaired the opening session, expressed his happiness that APOC was able to bring together pioneer scientists that had worked so hard in the battle against onchocerciasis and with the vision of conquering the disease now shifting from control to elimination.

In his presentation Dr Hans Remme, until recently a coordinator at the WHO Geneva-based Special Programme for Research and Training of Tropical Diseases (TDR), addressed current evidence/critical issues on elimination of onchocerciasis transmission in Africa.
He highlighted the excitement among the onchocerciasis family over the promising findings of the APOC-commissioned multi-country study started in 2005 in Senegal, Mali, Guinea-Bissau and extended recently to Kaduna state in Nigeria, which suggested the possibility of elimination of onchocerciasis transmission using ivermectin treatment alone over uninterrupted period of more than 10 years.

Dr Remme listed the critical issues to be tackled by the experts to include elimination thresholds/stopping criteria - when to safely stop the treatment with ivermectin as well as concern over recrudescence, alternative intervention strategies and how to address other endemic areas in Africa not currently covered by the control activities.

Dr Frank Richards of the Carter Center, reviewed the onchocerciasis elimination process and strategies in the Americas, where the disease is also endemic (but of lesser intensity), and possible lessons for Africa. The Pan American Health Organization (PAHO) has already adopted an elimination strategy and made significant progress in this regard.

In her address of welcome, APOC Director, Dr Uche Amazigo thanked the participants and donors for their contributions to river blindness control in Africa over the decades. On behalf of endemic communities she also expressed her gratitude to Merck & Co Inc., the pharmaceutical company that donated ivermectin free of charge for as long as needed.

Describing communities as the heart-beat of APOC, she said: “Onchocerciasis-endemic communities request you (scientists) to advice them on the way forward.”

According to Dr Amazigo, when CDTI was introduced in 1997, many people had doubted the ability of African communities to administer the treatment drug, ensure compliance or to take care of their own health, but the remarkable success of the CDTI strategy even in poor hard-to-reach communities has cleared all possible doubts.

One highlight of the meeting was the commitment by the Canadian International Development Agency (CIDA) to substantially increase its financial contribution to APOC.

While scientists are optimistic about the possibility of elimination of onchocerciasis transmission in Africa, they also acknowledge key challenges that must be overcome. These include concerns over conflicts in endemic communities and determining when and where to stop treatment. They equally stressed the need for (i) rigorous, sensitive and well accepted epidemiological/entomological surveillance tools for reliable assessment of the situation, (ii) strong prediction tool to advise on the risk of recrudescence and (iii) most importantly, the strong political will from endemic countries to ensure that governments allocate sufficient funds to complement donor support and ensure that river blindness is kicked out of Africa.

The meeting, co-financed by the Bill and Melinda Gates Foundation, the Mectizan Donation Programme (MDP) and APOC, is expected to come up with recommendations on the way forward for elimination of onchocerciasis transmission in Africa.