Enabling participatory health care and development

APOC is no longer just a static programme of activity to administer a single drug to control a single disease. It is a large-scale, comprehensive, participatory health and development initiative to improve the quality of life for hundreds of millions of the world’s poorest people, most of whom live in conditions that would not be acceptable anywhere else in the world.

Over the past 35 years, over US$ 3 billion has been invested to tackle Onchocerciasis, mostly in Africa, where some 90% of the disease burden prevails.

In Africa, control was initially based on aerial spraying of larvicide under the Onchocerciasis Control Programme in West Africa (OCP) but, following the advent of the drug ivermectin, control has been based almost solely on mass administration of this single drug, which has been donated free for as long as needed.

APOC, through its trademark Community-Directed Treatment with ivermectin (CDTI) system, puts people at the centre of Primary Health Care (PHC) by creating a comprehensive, integrated, adaptable and sustainable health service delivery mechanism which functions well in Africa’s unique environmental and social conditions. APOC encompasses health and welfare promotion, disease prevention and delivery of curative services and products, while also building capacity for equitable and proactive leadership and long-term sustainability in the health sector – on a national and regional basis.

Evolution and progress indicators

Operating on an unprecedented scale, APOC extends over 13.45 million km² an area 1.5 times larger than the USA and covers a total population of > 500 million, including some of the world’s poorest people. Most live in remote rural locations with little or no access to health services, with half of the onchocerciasis endemic target communities living below the poverty line.

Created in 1995, APOC will:
- establish sustainable community-managed treatment for 90 million people annually, protecting an ‘at-risk’ population of 120 million;
- alleviate unbearable itching and eliminate disfiguring skin disease, prevent ocular damage and 43,000 cases of blindness annually;
- cumulatively create millions of years of additional productive work and greatly boost staple food production;

Africa: true scale of APOC’s task
• facilitate creation of national capacity and empower affected communities to address their critical health issues;
• protect investments in onchocerciasis control.

**1996**
Operations begin with 41.8 million people infected, 385,000 blind and 29.7 million cases of severe itching and onchodermatitis.

**1997**
Extensive research proves CDTI “feasible (technically, financially and environmentally), effective and sustainable.” Affected communities are empowered to help direct programme activities (when, where and how to distribute ivermectin).

**1999/2000**
Integrated intervention delivery (“additional interventions” or “Add-ons”) begins, including Vitamin-A supplements; MDA against Lymphatic filariasis (LF) & schistosomiasis; and eye-care services, to improve overall health and reduce morbidity from a range of diseases.

**2005**
• 20% reduction in nodules.
• Severe itching reduced by 54%.
• Prevalence of blindness reduced by 33%.
• CDTI results in US$ 7 per DALY averted.

**2006**
• **YAOUNDÉ DECLARATION** of Ministers of Health of APOC member states.
• > 120 million still at risk.
• Additional US$ 46.5 million required from donors.
• 37 million infected people did not develop skin disease.
• Prevalence of severe skin lesions halved.

**2007**
• APOC programme extended to 2015 and broadened to cover 4 ex-OCP countries.
• 10.74 million benefitting from integrated delivery of PHC interventions.
• CDTI is seen as a “best practice” to emulate in other health programmes.
• Integrated delivery: doubles coverage with treated bednets; Community-based treatment of children with fever rises from 47% to 77%; vitamin-A distribution rises from 81% to 90%; leads to reduction in prevalence of LF in some countries.
• Ivermectin coverage rises where integration is used (up to 73.7%).

**2008**
• 16.2 million cases of infection averted.
• Itching prevalence reduced by 68% (8.9 million cases averted).
• 5.8 million DALYs averted.
• 25.7 million people infected in APOC states
• 64.26 million ivermectin treatments approved in APOC countries plus 14.97 million for ex-OCP nations.
• Cumulative >700 million ivermectin treatments approved (1998-2008).
• 117,000 communities engaged.
• **OUAGADOUGOU DECLARATION ON PHC AND HEALTH SYSTEMS IN AFRICA.**
• Co-implementation of multiple health interventions using CDTI network covers 37.5 million people in 11 countries.
• 98% of allocated budget disbursed.
**Current Progress (2009)**

- Evidence that ivermectin use can actually eliminate Onchocerciasis.
- 56.71 million people being treated.
- 120,354 communities engaged.
- 850,000 DALYs being averted annually (at a cost of US$ 7 each).
- Treatment cost = US$ 0.57 annually.
- CDTI training curricula introduced for medical schools in 12 countries.
- Minimum therapeutic target raised to 80%.
- 75% of projects evaluated deemed sustainable or making satisfactory progress.
- Rapid mapping of onchocerciasis almost completed in 19 countries.
- +18,000 CDD trained or retrained.
- 38,908 Health Workers (HW) trained or retrained.
- Total of 748,000 CDDs + 63,000 HW empowered & trained since 1999.
- 250 manager-level staff trained.
- US$ 1.12 million devoted to core CDTI activities (by 9 Member states).
- US$ 1.8 million worth of capital equipment provided to countries.
- Co-implemented MDA for 5 diseases operating in 5 countries.
- 1.29 billion ivermectin tablets donated to APOC (1997-2008).

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**Projected benefits (2015)**

**Health & Social**

- Estimated 90 million being treated annually via sustainable CDTI.
- 120 million protected.
- Prevention of 15 million DALYs.
- 68% reduction in blindness.
- Severe itching (among farming and fishing populations) reduced to 1%.
- Millions of tonnes of additional basic food and commercial crops produced.

**Economic**

- Cost per treated person drops to US$ 0.2.
- Millions of years of productive work added to national economies.
- Criteria for stopping of treatment established in member countries.
- Shrinking the onchocerciasis map in Africa.
- Economic Rate of Return = 17%.

**Health system & political**

- Additional > 1 million experienced CDD, HW & managerial staff engaged in health system activities.
- Enhanced development of epidemiological knowledge.
- Integration of community-managed multidisease intervention and prevention.
- Provision of specialized and adaptable equipment, skills, technologies and systems (national & regional).
- Novel partnerships developed for health improvements.
- Adaptation of control intervention to adjust to impact of Climate Change.
- Positive contribution towards achieving:
  - **MILLENIUM DEVELOPMENT GOALS**
  - **AFRICA'S GREEN REVOLUTION**
  - **VISION-2020** goal of elimination of all forms of avoidable blindness.

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27 years of healthy life gained for each US$ 1 invested

(African Development Bank, 2008)
Future needs

- Advocacy to regional bodies & strategic communication to maintain political commitment in Member states.
- Creation of capacity at peripheral health facilities and in communities.
- Mobilise & sustain funding and investment at all levels and in all aspects.
- Maintain annual and long-term compliance with treatment.
- Integrated delivery via the CDTI process of appropriate, proven health interventions.
- More effective reporting and health metrics gathering.
- Continued systematic application of RAPLOA and other mapping.
- Monitoring and surveillance of control programmes (and for drug resistance, impact of Climate Change, etc.).
- Continuing search for a macrofilaricide
- Improved disease awareness and community involvement in control activities.

An APOC challenge: Climate Change

Onchocerciasis is intimately linked with rainfall patterns, river basins and agriculture, all of which are forecast to be significantly affected by Climate Change. APOC’s target populations live in remote, rural locations and depend on subsistence farming for their livelihoods. These communities are especially vulnerable because they depend entirely on rainfed agriculture but have little human, physical and capital resources as well as very basic infrastructure, generally existing in poor health with poor food security and widespread malnutrition.
“The progress that has been made in combating River Blindness (Onchocerciasis) represents one of the most triumphant public health campaigns ever waged in the developing world.” (UNESCO)

Member states
- Angola
- Burundi
- Cameroon
- Central African Republic
- Chad
- Congo
- Democratic Republic of the Congo
- Equatorial Guinea
- Ethiopia
- Gabon
- Kenya
- Liberia
- Malawi
- Mozambique
- Nigeria
- Rwanda
- Sudan
- Uganda
- United Republic of Tanzania

In 2007, APOC’s mandate was expanded to include countries previously under the scope of the Onchocerciasis Control Programme in West Africa (OCP), where the disease is still present:
- Côte d’Ivoire
- Ghana
- Guinea Bissau
- Sierra Leone

Donors
(countries, institutions and foundations)
- African Development Bank
- Belgium
- Calouste Gulbenkian Foundation
- Canada
- France
- Germany
- Kuwait
- Luxembourg
- Merck & Co., Inc.
- The Netherlands
- Norway
- OPEC Fund
- Poland
- Portugal
- Saudi Arabia
- Slovenia
- UNDP
- United Kingdom of Great Britain & Northern Ireland
- United States of America
- World Bank
- World Health Organization

NGDO partners
- Christoffel-Blindenmission
- Helen Keller International
- Interchurch Medical Assistance World Health
- Light for the World
- Lions Club International Foundation
- Mectizan Donation Program
- Mission to Save the Helpless
- Organisation pour la Prévention de la Cécité
- Sight Savers International
- The Carter Center
- United Front Against Riverblindness
- US Fund for UNICEF

Research Partner
- UNICEF/UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases (TDR)

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