



Sciences for Prosperity

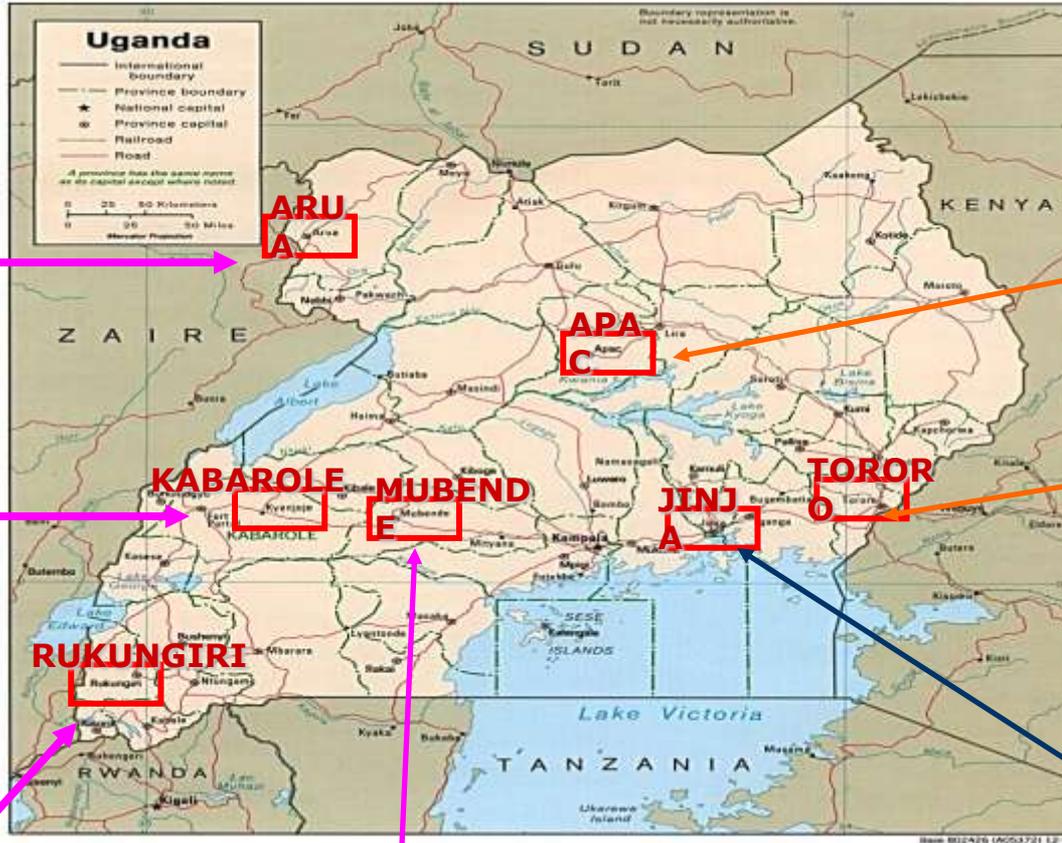
Measuring the Uptake & Impact of Policy Advice: UNAS Malaria Consensus Study

6th Learning Collaborative ASADI

07 – 11 November 2010, Cape Town, South Africa

Paul Nampala

Vector distribution



An fun,
309

An Gam,
816

An F, 37

An G, 83

An F, 51

An G,
1286

An Fun,
19711

An gamb,
1531

An Funestus, 912

An gambiae,
8309

An Fun, 9

An Gamb, 289

An F, 33

An G, 213

Vulnerability to epidemic malaria in the highlands of Lake Victoria basin: the role of climate change/variability, hydrology and socio-economic factors

**Shem O. Wandiga · Maggie Opondo · Daniel Olago · Andrew Githeko ·
Faith Githui · Michael Marshall · Tim Downs · Alfred Opere · Christopher C
Gilbert O. Ouma · Pius Z. Yanda · Richard Kangalawe · Robert Kabumbuli
James Kathuri · Eugene Apindi · Lydia Olaka · Laban Ogallo · Paul Muganyizi
Rehema Sigalla · Robinah Nanyunja · Timothy Baguma · Pius Achola**

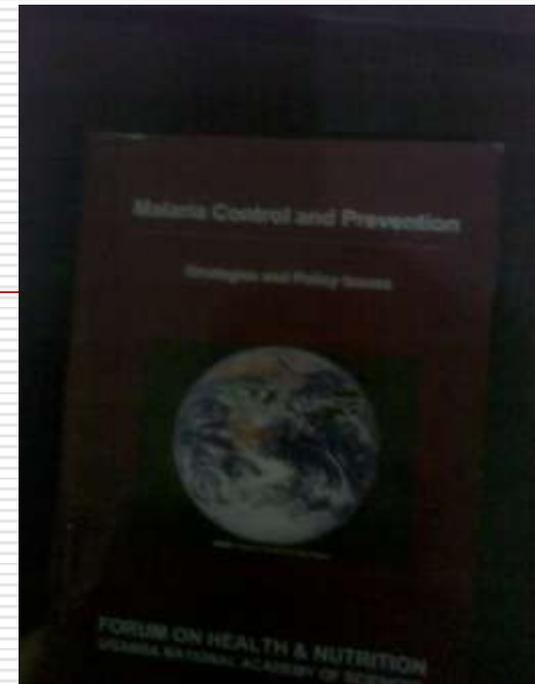
The national context

- Ministry of Health - Uganda
 - Decision taken to use Dichlorodiphenyltrichloroethane (DDT) as one of the insecticides for Indoor residual Spraying (IRS) but environmentalists against this

 - General public
 - Protagonists believe that DDT is the magic bullet whereas antagonists against the idea because of the effects on the environment and organic food exports

 - National research community
 - Lack of consensus as to whether to use DDT or not
-

Taking on the challenge



"In September 2006, UNAS held a workshop on Malaria Control and Prevention: Strategies and Policy Issues.

*The findings of the workshop summary report served as the basis on which the UNAS council selected the topic for their **first consensus study addressing malaria vector resistance to insecticides used for indoor residual spraying in Uganda.**"*

Intervention

- **Consensus study** (July 2007) comprising
 - Committee of nine **multi-disciplinary experts** (national, regional and international)
 - Committee of ten reviewers (mirror composition of above)

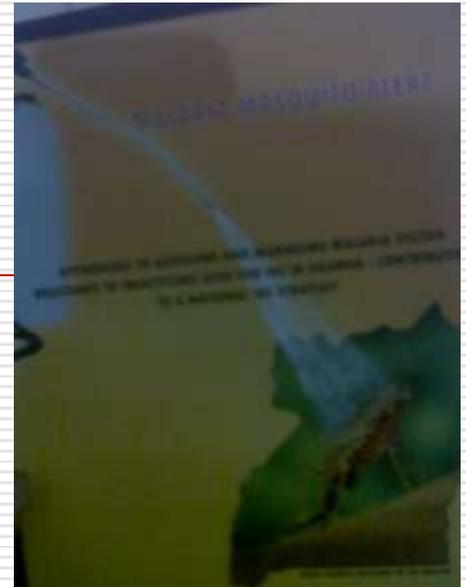
 - Use clear **statement of task** to identify, review and assess the current state of knowledge and policies pertinent to monitoring malaria vector resistance in the context of an effective national program for IRS with DDT for controlling malaria

 - Recommend **best practices** for the effective use of DDT and other malaria vector insecticides for use in Uganda that take into consideration insecticide susceptibility

 - Dissemination of report targeting key stakeholders
-

Report

Malaria Mosquito Alert



Approaches to assessing and managing malaria vector resistance to insecticides used for IRS in Uganda – contributing to a National IRS strategy

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Relevance of the report

“The report was the first published document to highlight the possibility of DDT resistance in the country”

“It was a useful document to convince the decision makers of the need to monitor insecticide resistance”

*Health news

DDT: Uganda National Academy of Science urges govt to follow WHO rules

HARRIETS OKOT

The High Court recently halted the current spraying of DDT (Dichlorodiphenyltrichloroethane) until a final hearing that will determine whether or not the spraying of the chemical would continue. The spraying of DDT, which is a synthetic pesticide, has had a long history of controversy because of its effect on human health and the environment as it contains chemicals that are non-degradable.

Uganda National Academy of Science (UNAS) released a paper that addresses the issues of Indoor Residual Spray (IRS)

and DDT, last Friday at the Sheraton Hotel Kampala.

The report was produced by consensus from a committee of public health and malaria experts and it is the first study to be issued by the UNAS.

According to Dr Paul Nampala the Executive Secretary of UNAS, "The key issue that will be addressed is the government's response to the World Health Organisation (WHO) guidelines when it comes to the spraying of substances such as DDT and IRS. One of the issues raised is the resistance that the parasite eventually develops despite the spraying of these

substances."

The report says that as the spraying continues, the government needs to monitor mosquitoes for resistance to insecticides, and manage the spraying programme in ways that minimise resistance. The use of IRS in a community such as ours needs careful consideration because of our environment and community. House structures and buildings in Uganda, especially those in rural areas are made of materials not conducive for IRS.

Once an insecticide-spraying programme is started in an area, it must be sustained over

the long term to be effective at protecting public health, the report says. Strong acceptance by communities is essential to the programme's success, and the Ministry of Health should take steps to build awareness of the campaign and engage communities in dialogue about it.

In addition, the Ministry should evaluate the effectiveness of its programme over time, which will involve collecting data on rates of malaria transmission, the size of mosquito populations, and the length of time insecticides are staying effective in homes, among other variables.

The New Vision, 7 July 2008



DDT has been effective in controlling mosquitoes, the insects which spread malaria and other diseases

Bush calls for the use of DDT

JAPAN

US president George W. Bush has called upon wealthy nations to help "lead fight malaria by treating them with DDT, among other things."

Bush made the remarks during a joint press conference with Japanese prime minister Yasuo Fukuda, ahead of the G8 summit of industrialised nations in Toronto, Japan.

"My support for Africa starts with knowing that too many people are dying of HIV/AIDS. And that's why the United States Congress joined the administration in supporting a H2B effort to help people get anti-retroviral drugs, help orphans get help, and help get an effective prevention program in place. The current number of people who have gone on anti-retroviral today has grown from 20,000 to 1.1 million people."

On other aspects of African development, the two leaders agreed to work together to increase the production of major crops in Africa, including doubling of rice production, and to promote their trade and distribution.

Agencies

The Daily Monitor, June 26, 2008

The Daily Monitor, September 24, 2008

Bukenya backs DDT spraying

Joseph Miti
Wakiso

Vice President Gilbert Bukenya has backed the indoor-residual spray of DDT, saying it's the best way to eradicate malaria in Wakiso District.

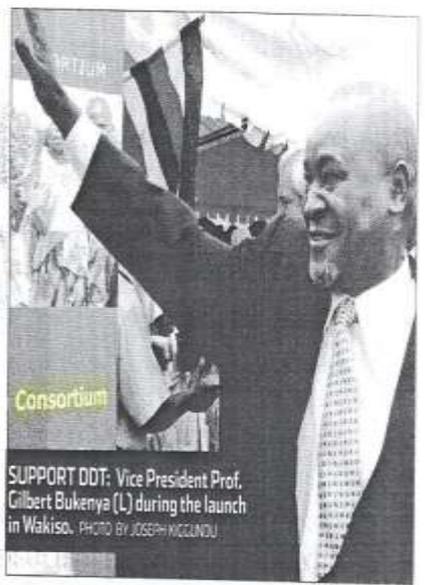
"I support the spray of any drug including DDT in the fight against malaria. DDT does not kill and it has been widely used in Europe and America," Prof Bukenya said.

He said this while launching the anti-malaria campaign in Wakiso District on Sunday.

"If you support me, I will bribe the government such that DDT is sprayed in Wakiso. I want this district to be a model in the eradication of malaria for the entire country," Prof Bukenya said.

Last year, the government launched a programme to

spray DDT to eradicate malaria, which is the leading cause of death in Uganda. However, the High Court halted the spray of DDT in Apac after farmers, and conservationists filed a petition it at DDT was harmful.



National and media attention

Police stops meeting on DDT

Robert Muhereza
Kabale

The police in Kabale dispersed about 30 district councillors and civil servants who were attending a one day sensitisation meeting on the spraying of DDT and its effects at the in Kabale to the meeting. Over 10 manded b charge of I tion, Mr C maisho sur and ordere

to stop the meeting immediately or else face arrest.

"We have express orders from above to disperse everybody attending this meeting. I am giving every body 10 minutes to leave this meeting room. The organisers of this

Toxic Free Malaria Control (UNETMAC), an NGO funded by the Swedish Society for the Conservation of Nature.

"Giving people information on the effects of DDT and its dangers is not bad," said Kabale District vice chairman

Crops should be stored in a different environment from humans

DDT indoor spraying will not harm agricultural exports

I WISH to respond to a story in The New Vision of March 31, 2008. "Bundungo rejects DDT spraying." The article said the district council had rejected the Government's programme of indoor residual spraying because cocoa buyers threatened to stop buying the produce if the area was sprayed with DDT. The Ministry of Health is aware of the claims allegations that stand for the control of malaria, including the insecti-

BY
DR MYERS
LUGEMWA



Soils impregnated with harm- the past, every household was

This does not mean that DDT is a magic bullet solution in the fight against malaria. Rather, it is part of a combination of strategies such as case management, intermittent preventive treatment in pregnancy, use of insecticide-treated nets, good environmental management, behavioural change, communication and information, community and education, and use of other insecticides such as larvicides.

Finally, the Public Health Act allows us to inquire as to a source and failure to have a environment in which the equines live distributed is itself an offence. Wana Jachi said be reminded of this act order to have healthy people to will grow more crops and in poverty, than addressing recurrent programmes like very Eradication Action in and Boma Bagumbira. accordingly it set on the list DDT spraying programme the near future as the dis-council allied in its series. by technical team is at your goal of the council should such to be furnished with, as on DDT after its impo- n in 2014.

The writer is the international ith specialist with the National Insect Control Programme in the Ministry of Health

take 600 words only

The New Vision, 25 April, 2008

Environmentalist Lukyamuzi demands sensitisation on DDT use

By Anthony Bugembe



Lukyamuzi opposes DDT

THE people of northern Uganda should be sensitised on the side-effects of using DDT to kill mosquitoes, the Conservative Party president has advised.

Ken Lukyamuzi, who is also an environment activist and former MP, said the spray must be optional and those who choose it should be compensated "for

the risks."

The Government has started spraying the chemical in Oyam and Apac districts.

A researcher for the national malaria control programme, Dr. Myers Lugemwa, said in January that Apac had the highest mosquito bites in the world.

"DDT was banned globally because of its persistent toxic effects on the environment and humans.

"It may cause liver cancer, blindness, infertility and brain damage," Lukyamuzi told journalists yesterday in Kampala.

"That is why most nations have kept away from it in preference for environmentally-friendly remedies (to eradicate malaria)."

But the ministry insists the chemical is harmless both to the environment and human beings.

Lugemwa stated that

before an area is sprayed, residents are sensitised on what to keep away from the chemical, like foodstuffs.

Lukyamuzi described the ongoing spraying tests in Oyam as degrading to the people and advised the health minister, Dr. Stephen Malinga, to resign for "not telling Ugandans the truth about DDT."

On another matter, Lukyamuzi urged Parliament to review the

Local Service Tax which the MPs passed last week.

"The object of the tax is meaningless. If it is going to be based on gainful activities, then its framers did not know what they are doing. Nearly all activities are gainful in one way or the other," he argued.

"Value added Tax was raised from 17% to 18% to meet the demand for such a tax. What has happened to the VAT money?"

The New Vision, Thursday 3 April, 2008

Tenders

DDT: Farmers lose contracts

Two companies cancel contracts

More than 10,000 households affected

Destiny Hakaweezi Kampala

Farmers in northern Uganda have lost their contracts to supply commodities to the lucrative European market as a result of the government's decision to spray DDT in their houses.

Share (U) Limited and Bo Weevil (U) have cancelled trading contracts with more than 11,000 farmers in the districts of Oyam and Apac, saying DDT is likely to contaminate the commodity supplies.

The affected households were certified suppliers of organic cotton, Sesame (Simsim) and Chillies (Pep-per) for export to the EU.

"We had to stop a good number of our certified farmers from supplying organic commodities because

we cannot afford to lose our exporting contracts with our buyers in the EU and USA who are against the use of DDT," Mr Marck Van Esch, the managing director of Bo Weevil (U) Limited, a Cotton exporting firm, said.

"The indoor spraying of the farmers' shelters, most of which are mud and grass thatched, is not safe for the commodities especially when

'DDT indoor spraying of houses is not safe for especially when the houses are used to store harvest and farm inputs.'

Marck Van Esch, Managing Director Bo Weevil(U) Limited

these shelters are used stores to keep the harvest and the inputs they use. These will definitely be contaminated with the residue".

He said once shelters are sprayed with DDT the residue takes more 10 years to fade from the houses, which

means farmers who lost their contracts will not have a source of income. However, another close to 20,000 farmers whose homesteads had not yet been sprayed may survive following a High Court order to the Ministry of Health to suspend DDT spraying.

The High Court on May 30 suspended the spraying of DDT in the entire country until there is a ruling on a suit filed by Share (U) Limited and Bo Weevil (U) and a host of other companies in northern Uganda contesting the government's decision to spray DDT in people's homesteads.

The Executive Director of the National Organic Movement of Uganda, Mr Moses Muwanga, said: "The collapse of exports has started as more districts are sprayed with DDT, more farmers are going to lose the market so the country should prepare."

Spraying of DDT has been a contentious issue since the government decided to adopt the approach in the treatment of Malaria. DDT spraying has already begun in northern Uganda.



Uganda Network on Toxic Free Malaria Control (UNETMAC)

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'UGANDA SHOULD STOP USING DDT'

The decision by the Government of Uganda to use DDT in combating Malaria is regarded as a disaster as it will cause irreparable damage to both human health and the environment. DDT will also cost Uganda's economy dearly and therefore should be halted.

It needs to be pointed out that it is also very unfortunate that DDT has already been publicized since those who reject it are branded as people in the opposition.

The two districts of Oyam and Apac are best known for organic farming. There are over 10,000 certified organic farmers who have already lost their business in the

On April 26, 2008, Uganda joined the rest of the world to

MAY 12-16, 2008

The East African, May 12-16, 2008

Now organic exporters say DDT spraying will destroy their market

HEALTH VS PROFIT? They fear Uganda's niche in America and Europe, worth \$500m annually, will be lost if traces of the chemical are found

By DAVID MUKIMBA SIKWA

Uganda's decision to restart DDT spraying, the country's export-led sector has been questioning its implementation.

DDT spraying means spraying of the commercial organic DDT to control malaria started in Uganda, the dispute between the government and exporters of organic products is so emerging. This has one "implication" in affecting the sector.

A consortium of exporters of organic products is preparing to file a lawsuit against the government, according to an announcement by World Health Organization guidelines on indoor residual spraying in the endemic districts of Oyam and Apac in the north.

The exporters claimed that the manner in which the spraying is being done will contaminate the food. A survey has also shown that Uganda's organic exports, worth about \$500 million annually, will be severely affected and European markets of organic DDT are closed.

The Ministry of Health has issued the decision, saying May 30, 2008, was the date for introducing DDT in fighting the epidemic that kills 500 people every day in Uganda. But a notice at the Ministry of Agriculture, Animal Industry and Fisheries said the DDT spraying that they were aware of the "adoption" which they are investigating.

In Kampala, Oyam District, Junior Minister for Health, said, "We spent three years ensuring that we reintroduce DDT using the right procedures and made the relevant environmental impact study to be an following of the guidelines."



Not an oversight thing: Dr Emmanuel Otiiso Otiiso, Junior Minister for Health, said, "We spent three years ensuring that we reintroduce DDT using the right procedures and made the relevant environmental impact study."

DAILY MONITOR

Truth Every Day

www.monitor.co.ug

Saturday, June 21, 2008

NEWS |

Court halts DDT spray in northern Uganda

RODNEY MUHUMUZA

Kampala

The High Court in Kampala has ordered the Ministry of Health to suspend the spraying of DDT until there is a ruling on a suit that seeks to stop the spraying of the chemical in northern Uganda.

The New Vision, 5
What 200
happened to
DDT spraying?

EDITOR—I wonder why the Government did not go ahead with the spraying of DDT to kill mosquitoes. The World Health Organisation recommended the use of the chemical to kill mosquitoes, but environmentalists are confusing the masses. These so-called experts on nature forget that many people are dying of malaria every day, making the disease more deadly than HIV/AIDS. We need a massive campaign on indoor spraying of DDT such as was done with the Bonna Bagaggawale (prosperity for all) programme to make people understand that it is safe. It seems environmentalists are agents of drug manufacturers who are scared of losing market once people are free from malaria. The Vice-President, Prof Gilbert Bukenya, recently invited the healthy ministry to spray his house in Kakiri with DDT to show masses that the chemical is safe. Others should emulate him.

Bobo Baluku
bobers2007@yahoo.co.uk

February
2009, 12
months after
UNAS report
completed

What happened to DDT?

- Since 2006, IRS used in 9 of 81 districts
- DDT used in 2 of 9 districts in 2008
- No DDT use after high court case in June 2008; judgement in favour of MoH in May 2009 but now case is with the constitutional court
- Susceptibility testing in 6 districts between Aug and Oct 2009 funded by PMI
- Preliminary results in discussion with MoH

Report recommendations moving into action

- 1: MoH running trials to assess susceptibility tests carried out in 2005 and 2006
- 2: The MoH carrying out a baseline assessment of key entomological variables such as mosquito species and biting behaviour
- 3: MoH using IRS Policy & Strategy for insecticide resistance management to guide selection of insecticides for IRS.....

Cause-effect association not verified

In Conclusion

- No formal evaluation to assess impact, attribution of UNAS Malaria Study
- Relevance of the report
 - Requests and interest from National and International Scientists
 - Indication that report catalyzed interest and recommendations taken up
 - Media coverage on DDT – citing UNAS Report
 - Court Proceedings, making reference to the Report
 - Parliamentary Debate (Hansard) – Translating recommendation into policy

In Conclusion

- Definition of success, reliable and valid impact indicators to measure success, attribution to cause and effect with regard to impact
 - Policy Statements/Pronouncements
 - Social Mobilisation
 - Public opinion and public mandate for policy action
- Nutbeam, D (1998) "Evaluating health promotion – progress, problems and solutions" Health Prom. Int. 13 (1), 27 – 44.

Report Recommendations into Policy

- **Expanded Policy Capacities:** building the capacities of policy-makers in different contexts, enabling them to be better informed while making policies.
- **Broadened Policy Horizons:** Expanding the scope of concepts giving Policy-makers a much broader outlook and be encouraged to think outside the box to address problems.
- **Affected Policy Regimes:** Research can impact overarching policy regimes by opening up policy processes and operational procedures of the government.

Source: Ward, V., A. House, et al. (2009). "Developing a framework for transferring knowledge into action: a thematic analysis of the literature." J Health Serv Res Policy 14(3): 156-64.

Acknowledgements

- Members of the expert committee (James Tibenderana, Chair)
 - MoH, Media, Courts of Judicature
 - UNAS Council, UNAS Forum on Health & Nutrition and staff
-



THANK YOU

