



AJ MABAO INVESTMENT & GENERAL PEST CONTROL LTD

P.O BOX 712

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VECTOR CONTROL PROGRAM

THE POTENTIAL VECTOR CONTROL ACTIVITIES ONSITE AND COMMUNITY.

Introduction:

Vector Control program is one part of preventive medicine in the health sector. With regard to the appliances, accessories and materials also processes applied program fits in Environmental processes as well as Safety. However there are so many Arthropod(s) which cause health hazards in our areas, but Anopheles mosquitoes are responsible with malaria transmission, and are abundantly found in Bulyanhulu mine site and its surrounding villages, as it is in other tropical areas. This is only the species which transmit malaria parasites

The arthropod is a group of flying and crawling insects which are capable of causing health hazards to humans through contact, mainly biting for blood sucking. The insects include mosquitoes, fleas, bees, cockroaches, mites etc.

There are three major areas of concern for control; these may include

- camp-site,
- BGML workers' housing schemes and
- Community surrounding the business area.



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The vectors normally are destroyed when growing at two stages i.e. young stage and Adult stage.

Mechanisms used to control vectors:

There are two mechanisms used to control vectors; mainly reducing their density to a level where they can not cause an indomitable health hazards.

These include:

- Control of adult vectors
- Control of young (larvae) vectors

1.IRS (Indoor Residual Spraying)

This is done mainly to control adult mosquito by applying pesticide on the walls of the houses in the following areas;

IRS (Indoor Residual Spraying); where insecticide is sprayed on walls, remains there for 3 to 4 months. Once the mosquito rests on wall quickly dies



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- BGML residential areas (Orca camp, Safari Camp, motel six, Tarangire, Duplex and Safari Camp.
- BGML workers' housing schemes (Ilogi & Bugrama)
- Kakola Center village
- Kakola No.9 village
- Bushimwe Village
- Bulyanhulu
- Bugarama centre & near-by residences.

Due to cost reduction; these sites were recommended due to the reason that they harbor BGML workers at higher percentage; and quite closer to the mine-site. Other villages were abandoned which may be helped by distributing bednets once in two years for malaria prevention.



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picture A. Indoor residual spraying

2.Young Vectors Management (Larvae control):

Mechanisms for controlling Larvae (Young) vectors:



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- Biological method (using attenuated bacteria) which normally is put in breeding areas to kill young insects.
- Chemical method (Synthesized insecticides) poured into ponds or water bodies to cause instant killing of young insects
- Environmental manipulation and management



Picture B. Larva searching on stagnant water where mosquito can breed.



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This is done in the following areas in order to control mosquito larvae.

- On site (around all breeding sites including ditches, ponds tyres storage facilities and septic chambers)
 - BGML housing schemes in BUGARAMA & ILOGI
 - Places closer to the mine-site
 - A certain perimeter from camp-site





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Picture C. larva searching.





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picture E. larviciding in stagnant water

Other areas/villages where larvae management cannot be effective environmental manipulation is introduced; that was executed by the village or sub-village leaders under the help of Vector control team.

3. *Ulv fogging (space spraying)*

- Mainly in BGML workers' housing schemes in BUGARAMA & ILOGI
- ULV-fogging; this is the use of concentrated insecticide sprayed by a car pulled machine. This machine scatter insecticide all round for knock down of targeted type of mosquitoes which cause malaria. This is done morning and evening
- Also by using back portal motorized machine.



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4.ITNs (Mosquito bed nets) distribution.

The bed nets have contributed much into adult mosquitoes' management, and prevented human-mosquito contact during bed time.

The coverage in community is good as the PMI (President's Malaria Initiative) distributed ITNs in 2012, nearly to every house. Up to this time 2014/2015 many nets have holes, where can cause significant mosquito bite. Most of the time, the VCP team tells villagers to repair or buy new ones.

Coverage and acceptance is about 95% in community. For Bulyanhulu workforce the company is responsible for ITNs provision to workers, however this has been done to both those dwelling on site (camp) and offsite.



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Picture F. posters for provision of malaria awareness

Malaria control and management. For community the program was not successful due to lack of man-power (VCP-community field assistants) because wages for them were not budgeted though the need was addressed to Department heads.

- Posters preparation & distribution
- Surveys & malaria data management
- Public meetings, addressing malaria control in villages
- Seminars



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6. PROOGRAM IMPLEMENTAION, MONITORING & EVALUATION

Implementation

The obligation for running Vector Control Program is to protect and preserve the public health among BGML workforce and Community members. The required parameters for achievement shall be reached through proper plan implementation, provision of feedback, and operating standards accomplishment.



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Monitoring

Mosquito density monitoring in community & Camp sites

The minimum density of malaria spreading mosquitoes is maintained through weekly trapping processes and analysis.

Station	Week	No.sub-station	Mosquito type/Species				Mosquito Density			
			Anopphls	Culex	Aedes	Total	Anopphls	Culex	Aedes	Total
Motel 6	1	1	0	0	0	0	0	0	0	0
	2		0	0	0	0	0	0	0	0
	3		0	0	0	0	0	0	0	0
	4									
sub-total										
Tarangire	1	1	0	0	0	0	0	0	0	0
	2		0	0	0	0	0	0	0	0
	3		0	0	0	0	0	0	0	0
	4									
sub-total										
Safari Camp	1	1	0	0	0	0	0	0	0	0
	2		0	0	0	0	0	0	0	0
	3		0	0	0	0	0	0	0	0
	4									

Fig. shows station for mosquito density.



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7.BEES MANAGEMENT

Vector Control section is currently dealing with the removal of bees from an unwanted place and we are receiving a lot of bees relocation calls on average in a day or a week. This includes in camp-site and community.

Bees handling is part of vector control activities, We are well aware of the urgency that will be required to attend when bees calls occurs.





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8.Community Involvement in Malaria Control

This is always achieved through collaboration between the villagers and Vector control team under agreed objectives and terms of references.

The areas of collaboration include

- Fumigation
- Larvae control and management
- Health education delivery
- IRS (Indoor Residual Spraying)
- Bed net surveys
- Environmental Management & manipulation
- Resources and man-power

IRS, ITNs survey and Health Education

The program is always cover the villages located in the outskirts of BGML mine site. This program intends to destroy indoor-vectors including malaria transmitting mosquitoes; with the goal to reduced malaria incidents for sustaining community productivity and BGML at large. The program is covering the following villages including their extended sub-villages;



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1.Ilogi Village

- Kihuzi,
- Ilogi kati,
- Isunga,
- Hindagi,
- Ipamila,

2.Bugarama Village

- Igalagalilo B
- Bunakoba
- Bugarama Kati,
- Igalagalilo A,

3.Bulyanhulu Village

- Kakola
- Bushing'we
- Busuwangili
- Busindi
- Rwabakanga
- Namba 9



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9. Cat survey and catching

Vector control section also we are dealing with cat control on- site and relocate them far away from the mine site.

10. Rodent control (Rat)

Vector control section also is dealing with rat control on-site, rats are very destructive vectors and they can cause disease to both animals and human being.

11. Vector control staff .

1. Abel Juma..... Vector Control Manager
2. Timoth Mhezzi Vector project coordinator
3. William Nyamwela..... Vector control Supervisor
- 3.Revocatus E. MkoyongiVector Control Assistant
- 4.Thomas J. Thomas ----- Vector control Assistant
5. Alphonse M. Juma ---- Vector Control Assistant
- 6.Andrew E. Habi ----- Vector Control Assistant

Prepared by

Abel Juma Mabao.

Vector control Manager





