Malaria Safe
CASE STUDY

Volta River Estates LTD (VREL) January 2014

VREL and Malaria Safe
The Volta River Estates Limited (VREL), a Fair Trade banana farming and export company, was established in 1988 by a Ghanaian/Dutch ventureship. VREL employs about 720 people, and is located on the banks of the Volta River in the Asuogyaman District of the Eastern Region of Ghana, which is one of the highest endemic malaria zones in the country. In 2006, malaria accounted for 60% of out-patient visits in the Asuogyaman District. The workers of VREL, their families and members of the communities in which VREL is located are all susceptible to this common yet deadly illness.

In 2007, VREL, through contact with the Asuogyaman District Malaria Advocacy Team (DMAT)\(^1\), initiated a program of developing and implementing a Malaria Control Strategy with the goal of reducing malaria morbidity and mortality among its workforce, workers’ dependants and inhabitants of plantation communities where workers live. The DMATs were district branches of the Voices for a Malaria Free Future Project of the Johns Hopkins Center for Communication Programs.

In 2009, VREL joined other companies who also partnered with the VOICES Project to implement a workplace malaria prevention strategy called Malaria Safe. The Malaria Safe Program grew out of the United Against Malaria (UAM) campaign, which brought together partners from many sectors to build political and popular will to fight malaria. Malaria Safe was developed as a means to invite the private sector to join the fight against malaria. The four pillars of the Malaria Safe Program include education, protection, visibility and advocacy. Companies are encouraged to educate and protect employees, their families, and the communities where companies operate, provide visibility for the fight against malaria and the UAM partnership, and advocate with other companies and government counterparts to increase investments made to control and subsequently eliminate malaria.

The purpose of this case study is to identify effects that the implementation of the Malaria Safe strategy has had on VREL and its plantation communities. To achieve this, data were collected from the Human Resource (HR) Department and analyzed: 1) annual

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<th>Malaria Safe Interventions:</th>
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<td><strong>Education:</strong></td>
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<td>• Train selected staff as malaria peer educators, promote malaria prevention education activities among plantation communities.</td>
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<td><strong>Protection:</strong></td>
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<td>• Use the company’s Fair Trade Premium to purchase and distribute 900 LLINs to its workers; improve the capacity of VREL clinic staff in malaria treatment and referrals.</td>
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\(^1\) The Voices Project of Johns Hopkins Center for Communication Programs established the District Malaria Advocacy Teams between 2007 and 2013. The DMATs provided a forum for district leaders to conduct malaria needs assessments and develop advocacy plans to find the resources to meet the malaria control needs of the district. Membership in the DMATs included traditional and government leaders, district health officers, school representatives, private sector and civil society.
malaria cases recorded by the HR Department, 2) number of malaria cases referred to nearby referral centers, and 3) absenteeism from work attributed to malaria. The data analysis is presented below.

1.0 MALARIA CASES

Figure 1.1 Annual Malaria Cases

In 2007, a total of 321 cases of malaria were recorded among the 720 member workforce of VREL. This dropped by 41.1% to 187 cases in 2008 only to rise again to 279 in 2009. The year 2010 experienced another drop to 184 malaria cases by 34% of the previous year’s recorded cases. The rise and fall scenario continued in 2011 when a total of 261 cases were recorded only to fall again to 189 cases in 2012 by 27%.

On the whole, it should be noted that there has been a general decline in malaria cases among the VREL workforce by 58.8% from a high of 321 in 2007 to a low of 189 cases in 2012. However, given the fluctuations, there may be an increase again in 2013.

2.0 ANNUAL REFERRAL OF SEVERE MALARIA CASES

Data was collected on referral of malaria cases from VREL clinics to nearby referral hospitals especially the VRA Hospital at Akosombo. Analysis of this data is presented below.

Since 2008 and 2009 when the highest number of referrals were made (219), gradual improvement has been made in preventing severe malaria cases requiring referral to major health facilities as referral cases continue to drop from 204 in 2010 to 133 in 2012.

It stands to reason that as VREL sustains its Malaria Safe activities, fewer cases of severe malaria might be experienced by VREL workers in the future.

3.0 MALARIA-RELATED ABSENTEEISM

3.1 Annual Absenteeism

Figure 3.1 Annual Absenteeism from 2007-2012

Malaria has been noted to be a major cause of absenteeism in many workplaces and VREL is no exception. Malaria-related absenteeism data from VREL shows a general decreasing trend over the period 2007-2012 with the exception of 2009 when a small increase was recorded. On the whole, the highest number of malaria worker related absenteeism, 410 days, was recorded in 2007, and aside from the 2009 bump in absenteeism, numbers have continued to decrease until 2012 when a total of 176 days – amounting to a 53.3% reduction – was recorded.
The rainy season extends from February through September and absenteeism is higher during this period. Absenteeism is lower the dry non-rainy months of October, November, December and January. Despite these fluctuations, the location of VREL workers’ communities on the banks of the Lower Volta River makes these communities suitable areas for all year round breeding of the anopheles mosquitoes and malaria transmission.

**Figure 3.3 Absenteeism Before and After Intervention**

![Graph showing absenteeism before and after intervention](image)

It is further noted as depicted in Fig. 3.3 that there was a decline in absenteeism after the initiation of Malaria Safe activities in 2009. For the two years before the introduction of Malaria Safe activities, the mean number of employees absent per month was 32.54 that reduced to 21.38 employees absent per month during the Malaria Safe active years of 2009-2012. It is therefore noted that the drop in absenteeism especially during the Malaria Safe active years, 2009-2012, is a significant development as it translates into more hours spent at the workplace instead of the home or hospital and would further translate into higher productivity and output for the company.

**CONCLUSION**

VREL continues to conduct two of the Malaria Safe Pillars, Education and Prevention. Key activities included the distribution of 900 ITNs to workers, malaria prevention and treatment education among workers, and improving the capacity of its 30 Health Peer Educators and clinic staff.

Admittedly, these efforts have yielded results and demonstrated a positive trend in the reduction of malaria burden at the company. The general and continuous decline in recorded malaria cases at VREL clinics from 321 in 2007 to 189 in 2012, a drop of 58.8%, is a promising trend. Referral of severe malaria cases from VREL clinics to nearby hospitals has also been on the decline from 219 cases in 2008 to 133 in 2012, a fall of 60.7%.

Most significant however is the annual gradual decline in absenteeism due to malaria being recorded by VREL from 410 in 2007 to 176 in 2012, a 57% reduction. The 22.8% rate of reduction in absenteeism from 228 in 2011 to 176 in 2012 is a promising achievement for the company though one that will require sustained action for VREL to achieve its productivity targets.

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