Protection of farmers’ health and optimal agricultural production

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Millennium Development Goals

- World’s time-bound and quantified targets for addressing extreme poverty in its many dimensions
- Goal 1 aims to eradicate extreme hunger and poverty
- Sub-Saharan Africa is the epicenter of the crisis with continuing food insecurity and disease
Promotion of agriculture

- Means to address extreme hunger and poverty
- Contingent on the promotion of health of the farmers
- Cameroon’s rich forest and savannah also harbour vector borne diseases such as malaria and filariasis
- Non utilisation of arable land
Need to help Rural Areas

Concern about migration from rural areas
Decrease in agricultural productivity

Causes

Constant biting at night due to mosquitoes
Constant biting during day due to blackflies
Methodology

- Sanaga Maritime and Fako divisions
- Questionnaire:
  - Villagers- greatest impediment to agricultural endeavours
  - Health services- common problems
- Sanaga Maritime: blood samples and skin snips- malaria, loa loa, O. volvulus
Impediment to farming

- Ill-health
  - malaria
- Presence of insects
  - Mosquitoes
  - Black flies
**VILLAGE Medical results December 2006**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>MALARIA</th>
<th>FILARIASIS</th>
<th>Loa loa</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>P. falciparum (%)</td>
<td>O. volvulus (%)</td>
<td>(%)N</td>
</tr>
<tr>
<td>NTOL-OSEEBE</td>
<td>49</td>
<td>15 (30,61%)</td>
<td>34 (69,39%)</td>
<td>3 (6,12%)</td>
</tr>
<tr>
<td>LENOUCK</td>
<td>76</td>
<td>14 (18,42%)</td>
<td>49 (64,47%)</td>
<td>5 (6,58%)</td>
</tr>
<tr>
<td>DOMDJENGUE</td>
<td>99</td>
<td>11 (11,11%)</td>
<td>30 (2970%)</td>
<td>3 (3,03%)</td>
</tr>
<tr>
<td>MBEBE</td>
<td>107</td>
<td>24 (22,43%)</td>
<td>59 (54,63%)</td>
<td>7 (6,54%)</td>
</tr>
<tr>
<td>MANGUENDA</td>
<td>164</td>
<td>15 (23,44%)</td>
<td>24 (37,50%)</td>
<td>2 (3,12%)</td>
</tr>
<tr>
<td>KIKOT</td>
<td>33</td>
<td>9 (27,27%)</td>
<td>21 (63,64%)</td>
<td>2 (6,06%)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>428</td>
<td><strong>88</strong> (20,56%)</td>
<td><strong>217</strong> (50,70%)</td>
<td><strong>22</strong> (5,14%)</td>
</tr>
</tbody>
</table>
Six Village Pilot Implementation Trial

**Medical survey**

- Malaria ..... 21%
- Filariasis.....51%
- Loa loa.......5%
Promotion of agriculture to create wealth and alleviate hunger is impeded by the prevalent vectors which are a nuisance and transmit disease: malaria (deaths in children), filariasis (blindness)

Reinforce the relationship between health and development
Yaounde Initiative Foundation

Training of YIF trainers

Training of Vector intervention teams (VIT)

VIT implement control in Villages
Training

Village Intervention Teams
Training VITs
Blackfly breeding site
Blackfly larvae on vegetation
Blackfly larviciding
Numbers of larvae per trap

4h before | 4 h after | 24h after
---|---|---
300 | 50 | 50

The chart shows a significant increase in the number of larvae per trap 4 hours before the event, with a much smaller number 4 hours and 24 hours after.
Nombre de mouches noires

Jours

Lenouck
3000m de la Sanaga près des maisons

Ntol 1000m de la sanaga près des maisons

Mbebe 150m de la sanaga près des maisons

Mbebe 25m de la sanaga
Mosquitoes caught in exit traps to 18 May
Mosquitoes caught in Exit traps

- Lenouck IRS
- Ntol ITN
- Mbebe IRS+ITN
- Kikot screen + mist
- Ndom Mist +ITN
- Mang control
In conclusion,

- The promotion of agriculture in Cameroon is thwarted by the ill-health of the farmers and the presence of insects (disease vectors).
- Vector control and the provision of health services need to be part of agricultural promotion programmes.
- Resistance to insecticides may arise as a result of their use.
Thank you