LARVAL SOURCE MANAGEMENT IN MALARIA ELIMINATION

RBM VECTOR CONTROL WORKING GROUP
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COMPONENTS OF LSM

- Application of:
  - Chemical; and/or
  - Biological larvicides to potential vector breeding sites

- Environmental management
  - Complete elimination; and/or
  - Modification of potential breeding sites
THE GENERAL UNDERSTANDING

- LSM is likely to be best utilized:
  - Where breeding sites are localised, easily identifiable, accessible & limited in number
  - If applied at a very high coverage – deal with almost all sites
    - Urban areas
    - Other specific circumstances
  - Man made breeding sites
THE GENERAL UNDERSTANDING CONT.

- LSM is likely to be best utilized cont.:
  - Areas of seasonal malaria where:
    - Intervention is more feasible & sustainable
    - Density reduction is likely to have a significant impact
      - This is particularly true where less efficient vector (e.g. *arabiensis*) is the major vector
  - Where malaria burden is low (no intense transmission)
IN ELIMINATION - OPPORTUNITY

- Breeding sites are localised, easily identifiable accessible
  - Targets concentrated around the identified active or potential transmission foci

- High coverage is attainable
  - Transmission is focal
  - Foci number limited
IN ELIMINATION – NEED

- When malaria is reduced to very low level, complete interruption of transmission will become a challenge.
  
  + Outdoor transmission will continue particularly in areas where *An. arabiensis* is the main vector as it can feed and rest outside as much as it does indoors.
  
  + Even in areas where *An. gambiae* s.s and *An. funestus* are the dominant vectors the possibility of residual low level outdoor transmission is real (documented).
When malaria declines and no longer important households refuse to IRS and become reluctant to effectively use LNs

LSM is important to sustain malaria free status

- LSM in the context of IVM is the preferred long term strategy
  - Education/ awareness & engagement of communities
  - Multisector responsibility & accountability
  - Legislation