# **GLOWSTAR Lantern Marketing - Kenya**

# ITC ITDG East Africa IDE Bangladesh

Supported by Sollatek Kenya, Sollatek UK and funded by DFID

#### 1. Background

The Glowstar lantern program aims to develop, produce and market an affordable, reliable lantern capable of meeting the lighting needs *of* the rural poor in Kenya. The program partners met in Nairobi to review the market research findings, set product design criteria and discuss the marketing strategy to be adopted. IDE, an organisation with expertise in rural mass marketing, is responsible *of* the marketing plan and marketing work packages. This strategy paper aims to lay down the broad operational plan for mass marketing of the Glowstar and would serve as the base line for the detailed marketing plan, that would be finalised after the product and pricing decisions have been arrived at.

Inputs for the strategy paper have been gathered from the discussions held in Nairobi, individual meetings with persons familiar with the solar market and various reports and studies into solar activity in Kenya.

#### 2.0 Target Market

The Solar Lantern Market Review Report prepared by Energy Alternatives Africa Ltd. has detailed the following prioritised market segments expected for the low cost lantern in Kenya:

- Rural Households
- Small businesses
- Urban Households
- Tourism
- NGO / Church / Relief
- Government

As marketing intervention has to be sharply focused it was decided to target the rural segment including households and rural small businesses. This would also include urban buyers for rural users. This shortlisting was based on the program objectives of reaching the rural poor. Further, the need for cheap improved lighting is maximum in this segment.

#### 2.1 Geographic Segmentation

It was decided that in the initial phase of the program pilot marketing should be initiated only in a selected area of Kenya. The geographic limitation, though predominantly, driven by budgetary reasons, provides an opportunity to fine-tune the marketing plan by testing the product and marketing strategy in a limited area.

Appendix A details the demographic profile and market potential of the major districts of Kenya. These twenty districts were selected on indicative parameters like the population, average income levels and existing awareness of PV technology. To narrow the focus further, the following 5 districts and Nairobi City have been shortlisted for the first phase of marketing activities, with the program rolling out nationally depending on volumes of sales realised. The 5 districts were selected on the basis of awareness levels of solar systems, size and market potential. The priority ranking of the districts indicate the preferred order of the marketing rollout.

District	Priority	Distance from Nairobi		Degree of Presence	
		Km	Hours	SHS systems	ITDG EA
Nairobi	1	-	-	High	High
Meru	1	225	3	High	Low
Embu	2	125	1.5	High	Low
Nyeri	3	150	2	Medium	Low
Nakuru	4	150	2	High	High
Kissi	5	350	5	Medium	Medium

#### 3.0 Product Pricing

The most important determinant of the marketing mix of the Glowstar is the final price. Price elasticity of the Glowstar is expected to be very high and it is critical that the final product has a very competitive price as

- -the market research findings indicate that more than 40% of the target market have an average monthly household income level of \$45 -\$90.
- the customer price of a solar home system (SHS) of 12 watts, capable of powering 2 lights and with multi use facility is sold at around \$ 200 -\$ 300. The Glowstar needs to be priced substantially below this, otherwise between the two products the solar home system is the preferred alternative.
- the hurricane lamp and the wick lamp cost \$5.5 and \$0.5 respectively. The Glowstar needs to be priced low enough so that savings from minimal running costs when compared to kerosene lighting can be seen within a reasonable payback period.
- the annualised cost of the Glowstar should favourably compare to the current lighting costs (cost of kerosene, dry cells, candles, etc.) of the customers.

The findings of the market research and the survival study after 15 months usage indicate that the Glowstar has to be priced below \$100 (Ksh 7,000) for customer acceptance. It is also felt that the market would proportionately expand with lowered pricing. The price elasticity of the Glowstar below the base price of Ksh 7,000 needs further researching.

#### 4.0 Supply Chain

#### 4.1 Distribution Mechanics

Sollatek Kenya will be responsible for distribution of the product through their current distribution network, which covers the major district towns. The commercial functions of product marketing like stock movement, billing, cash collection and dealer management will be done by Sollatek Kenya while the Glowstar marketing project will finance and be responsible for the promotion/ demand creation in the 5 shortlisted districts.

#### 4.2 Market Structure

The current distribution network for durables and mid and mid-high value products generally extends into towns only. Mass marketing in rural markets requires concentrated grassroot promotion, backed by a village level product delivery system. Therefore to extend the

penetration of the delivery system of the solar lanterns and also leverage local word of mouth promotion it is envisaged to create a cadre of village level Sales Agents (SAs) who would operate on commission basis. These SAs could be either school teachers, SHS technicians etc. who are based at the village level and stock, promote and sell the Glowstar as a part time business. With an expansion of sales volume, full time sales agents may develop.

The SAs would increase the customer price of a lantern by around 5 -10%. However this would be more than off set by the following advantages accorded by the SA network:

- The SA network would extend the distribution penetration to the grassroot level.
- This would help enlist the opinion leaders of the community in promoting the Glowstar, which would lead to better credibility.
- The SA network would facilitate door to door marketing and product demonstration at the customer point.
- It would be easier to tap into the community/church meetings and small savings group by using the social connections of these local agents.
- The SA agent network is sustainable as they are financed through margins that are built into the product pricing.
- The SA network could be leveraged to market and disseminate any other product that is targeted at the rural poor.

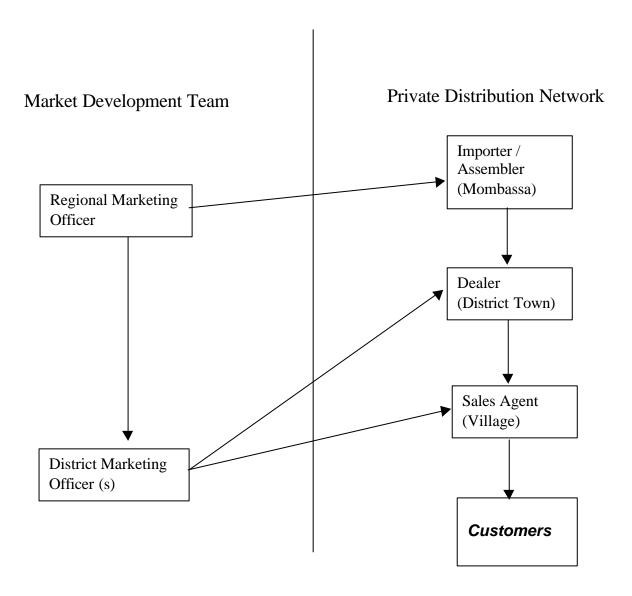
#### 4.3 Investment Gap

Any product introduction requires a large investment in the development of the market base. Generally companies capitalise the initial expenses of promotion, supply chain development cost and other product introduction costs over a period of time and build these costs into the product price. However if the market development costs are built into products targeted at the rural market, like the solar lantern, the product becomes unaffordable to the poor. This is the primary reason why most companies do not design and market products exclusively targeted at the marginalised segment of the market.

The central rationale of the market plan is to use development funds to absorb the investment costs of market development while simultaneously create a vibrant, sustainable private channel for the lanterns. Once the sales reach a critical mass, the external support in terms of marketing/promotion intervention can be terminated. The supply chain for the solar lantern is devised on the above logic with two components: the long-term distribution network and the temporal market development network. These two components are independent and the market development team could be disbanded once the market is saturated without affecting the private distribution channel.

# 4.4 Distribution network

Figure below is a pictorial representation of the proposed supply chain for solar lanterns in Nairobi and the five districts of Kenya.



#### 4.4.1 Private Distribution channel

#### Manufacturer

- Distribution of the Glowstar including the commercial functions of stock movement, billing, collection and sales accounting.
- Distribution of the spare parts for the Glowstar
- Dealer network creation and supply chain monitoring.
- Effective handling of warranty procedure.
- Liaison with the market development team
- Product promotion through mass media
- Provide credit to the channel to facilitate customer credit financing by the dealers

#### Dealer

- Product stocking
- Spare part stocking and after sales support
- At counter promotion and merchandising
- Effective handling of warranty issues
- Provide selective credit to customers

#### Sales agent

- Selling of lanterns on commission
- Link between customers at village and the product distributors in the town
- Participate in the promotion activity like demonstration in weekly markets, church meetings, etc.
- Identifying and tapping self help groups and farmer cooperatives to provide lanterns on hire purchase.

#### 4.4.2 Market development team

The market development team comprises of one District Marketing Officer (DMO) for each of the selected districts reporting to the Regional Marketing Officer who would be responsible for the overall marketing activities in the five districts as well as specifically responsible for the promotion activities at Nairobi. This team would be responsible for setting up a grassroot network of sales agents and linking them with the private sector distributors. Further, the dynamic and static promotion activity at the villages (refer to section on promotion) shall be done by the DMOs with the assistance of the local sales agents. The market development team is envisaged to be a temporary support mechanism to the private sector channel and will be disbanded once Glowstar achieves a sustainable critical mass of sales. Further sales would be spurred on by positive word of mouth and demonstration effect.

The detailed job responsibilities of the District Marketing Officers and the Regional Marketing Officer are given in Appendix B.

#### 5 0 Promotion Strategy

The proposed promotion strategy for the Glowstar is designed to create a high level awareness and opportunity for product trial through grassroot promotion, demonstration and tapping of the early adopter, opinion leader network. The promotion activities focused at the

village level would be the primary responsibility of the market development team. The promotion activities for the two market segments, i.e. the rural and urban buyer for rural usage will be different. The promotional strategy is broadly divided into the three elements enumerated below.

#### 5.1 Launch Promotion

At the onset of the marketing activities of each district, to create an awareness campaign of the product, its benefits and brand name a mobile campaign needs to be undertaken. A hired truck shall be used to display Glowstar and provide the potential customers with information on product features, price, place of availability, etc. Handbills giving above information along with dealer address shall be distributed.

#### 5.2 Dynamic Promotion

Rural customers prefer to experience the product prior to making a purchase decision. Therefore product demonstration which offers an opportunity for customers to tryout the product in a familiar environment is a cornerstone of a successful rural marketing campaign. Demonstration of the Glowstar is planned to be achieved through:

- 1. Product promotion and demonstration at the major weekly markets,
- 2. Participation in the annual agricultural shows of each of these districts as well as the agricultural show at Nairobi,
- 3. Product promotion and demonstration at the church meetings, farmer cooperative meetings and similar social events at each village, using the network of sales agents,
- 4. Targeting rural shops and small businesses for the initial sales. These lanterns being visible and in a public place would provide high visibility and good word of mouth publicity,
- 5. Identifying and selling lanterns to opinion leaders and early adopters who in turn would be influencers of further sales. The sales agents would also act as a strong network of influencers,
- 6. Exploring possibility of centralised bulk sales to schools as they serve as good demo points for lanterns. (There are around 10,000 rural schools in Kenya),
- 7. Product promotion, demonstration and initial sales at local women groups, known as merry-go-round groups.
- 8. Placement of over 25 lanterns in each district to public places as a results of the Rotary UK lantern appeal

To support the above direct promotion activity, innovative rural advertisement opportunities like soap operas in radios, bus boards, village dramas and product endorsement opportunities need to be examined.

#### 5.3 Static Promotion

The dynamic promotion activities shall be supported by a limited input of localised promotion material like dealer signage, wall paintings, banners, stationary bill boards and bill boards mounted on transport vehicles. Similarly initial customers in every village could be provided

a board reading "This house is powered by Glowstar" to be displayed in the front.

#### 5.4 Nairobi Promotion

The promotion activities in Nairobi would be different from that detailed above. At Nairobi the promotion would target customers who buy the product as a gift. Along with mass media promotion, specific promotion tools like demo/sales counters at supermarkets during Christmas and flyer insertions in newspapers shall be done.

The Marketing Plan shall detail the promotional strategy and promotion mix recommended for the rural marketing of the lanterns, taking into consideration the budget and promotional expenses.

#### 5.5 Branding

The promotion of solar lantern should aim to create a strong brand equity for the lantern to prevent a downward spiral in quality due to low-cost imitators. Further a strong brand equity created in the first phase would leverage the marketing in the other districts of Kenya.

Quality assurance mechanisms will have to be an integral element of the manufacturing, distribution and complaint addressal systems. The brand equity would be used to set up a benchmark of quality in solar lanterns. Glowstar already has a logo, which can be seen in Appendix C

#### 5.6 Credit

Due to the high initial cost of the lantern, tapping into existing formal and informal credit systems is a critical element of the marketing plan. Several initial options for leveraging credit groups are

- 1. Offering hire purchase schemes through farmer cooperatives to their members.
- 2. Tapping into the village level "Mwethia" women groups. These are informal village based groups of 40-50 women, formed for encouraging small savings and is popularly known as "Merry -go- round" groups.
- 3. Official Savings and credit organisations such as KUSCO (Kenya Union of Savings and Credit Organistions) can be used so that customers can either use their existing savings, or receive credit from the organisation

Further the feasibility of extending credit to individual farmers through the dealers will need exploring.

#### 6.0 Project Time Fame

Period	Activity	Responsibility
April 01	Strategy Paper	IDE
May 01	Supply Chain Study	IDE, EAA
May 01	Budgetary Info Collection	ITDG East Africa, IDE
May 01	Focus Group Testing	ITDG East Africa, IDE
June 01	Marketing Plan	IDE
June – Aug 01	Staffing / Training of DMO's/RMO's	ITDG East Africa, IDE
Aug 01	Start of Marketing	ITDG East Africa, IDE

# Appendix A

DEMO	DEMOGRAPHIC PROFILE OF SELECTED DISTRICTS					
Rank	District	Region	No. Rural	Av. monthly	Potential	
			Households	HH income	kW	
1	Uasin Gishu	Rift Valley	72,442	25,172	2,638	
2	Kiambu	Central	179,592	10,143	2,635	
3	Murang'a	Central	155,890	11,513	2,596	
4	Trans-Nzoia	Rift Valley	73,586	22,462	2,391	
5	Kissi	Nyanza	162,543	10,074	2,369	
6	Narok	Rift Valley	83,355	18,164	2,190	
7	Meru	Eastern	143,321	9,321	1,932	
8	Kakamega	Western	169,828	7,270	1,786	
	Kericho	Rift Valley	117,501	10,369	1,762	
10	Kwale	Coast	75,373	15,070	1,643	
11	Nakuru	Rift Valley	170,523	6,607	1,630	
12	Vihiga	Western	104,769	9,900	1,500	
13	Bungoma	Western	124,112	7,982	1,433	
14	Nandi	Rift Valley	90,678	9,925	1,302	
15	Siaya	Nyanza	159,888	5,463	1,263	
16	Kisumu	Nyanza	111,389	7,627	1,229	
17	Bomet	Rift Valley	74,144	11,265	1,208	
18	Nyeri	Central	116,598	6,898	1,163	
19	Migori	Nyanza	117,018	6,641	1,124	
	Machakos	Eastern	123,145		1,123	

KENREP PV Market Survey 1997

## Appendix B – Job Profiles

# **Regional Marketing Officer**

Location Nairobi

Reporting to ITDG East Africa

Length 8 months

#### Key job repsonsibilities

- 1. Demand forecasting and setting targets
- 2. Acheivement of sales targets by DMOs
- 3. Management of the tem of 5 DMOs
- 4. Liaison with Sollatek Kenya and other distributors
- 5. MIS implementation and reporting
- 6. Designing of promotional material
- 7. Implementation of DMO incentive scheme
- 8. Target setting and work planning of DMOs

### **District Marketing Officer**

Location Meru, Embu, Nyeri, Nakuru or Kissi

Reporting to Regional Marketing Officer

Length 8 months

# Key job responsibilities

- 1. Achievement of sales targets in the district
- 2. Co-ordinate the promotion activities in the district
- 3. Demand forecasting and setting of targets
- 4. Identify and support sales agents in the district
- 5. Provide service support to initial customers
- 6. Ensure warranty system implementation
- 7. Ensure product promotion and demonstration at the major weekly markets
- 8. Participation in the annual show of the district
- 9. Participation in product promotion and demonstration at church meetings, farmers cooperative meeting and other social events at villages, along with sales agents
- 10. Identify and sell lanterns to opinion leaders and early adopters
- 11. Liase with local savings and credit associations to promote sales through members