

Marketing first: Getting ceramic pot filters to the target group

Fieldnote

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Preface

When one embarks on a project to supply people having no access to safe drinking water with a water treatment system such as the ceramic pot filter (CPF), the marketing aspects of such an enterprise are not necessarily the first thing one considers. Securing raw materials, setting up the production facility, training staff and starting up production all demand much energy and attention.

We are convinced, however, that drafting a strategic marketing plan in the early stages of a project is of critical importance for its success. After all, the needs and perceptions of the potential customer should determine the design and price range of the product, the organization of the supply chain, and how sales and distribution take place.

This field note is intended as an introduction to setting up a marketing strategy for managers of new or existing CPF projects (or, for that matter, any other household water treatment and safe storage system). These projects aim to bring safe water to people who currently have no access to reliable water sources. Because these people will have to change their behaviour or “water habits” in order to use these new water systems, good social marketing instruments are needed, as we will explain in this document. Elements that make up a marketing strategy are independent of the business models that are envisaged for the projects, whether the project fits within a subsidized water safety campaign by a non-governmental organization (NGO), or whether it is the commercial enterprise of a local manufacturer.

Because the contents of this note are partly based on an MSc research project carried out in Cambodia by the first author, a number of examples given are derived from practices in Cambodia.

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Aqua for All

Aqua for All creates a link between water and sanitation projects in developing countries, sponsors and socially responsible entrepreneurship. Bringing together knowledge, expertise and finances Aqua for All works according to the added value principle.

Aqua for All as a broker establishes sustainable, long lasting partnerships between Dutch water partners and local beneficiaries. Aqua for All acts as a co-finance partner to stimulate investments in water and sanitation projects. Aqua for All stimulates business development, linking 'cleaner and healthier' to 'economically viable', as a weapon against poverty. Aqua for All enables access to expertise on water and sanitation from the Dutch water sector. Aqua for All uses its broad experience to increase and safeguard the quality of development projects. Thus Aqua for All is a reliable partner for co-funders, donors and ngo's. Aqua for All is supported by a widespread group of participants and donors: water companies, water boards as well as private companies and consultancy agents.



PRACTICA Foundation

The PRACTICA Foundation aims to facilitate research, development and commercial application of technology in the field of water and energy in developing countries. The choice for water and energy-related technology resulted from an assessment that these are often prime movers in rural livelihoods.

Such technologies and services can have a beneficial impact on many aspects of the lives of the poor, if they are made widely available and, where necessary, their efficiency and reliability are improved. Ideally, this should be achieved by engaging the local private sector and following the principle of 'poverty alleviation as a business'. This strategy requires a catalyst role.



Het Waterlaboratorium

Het Waterlaboratorium is one of the four Dutch drinking water laboratories, serving three water supply companies in the North-West of the Netherlands. Being part of a well-organized water and sanitation infrastructure, the company wants to contribute to the achievement of UN Millennium Development Goal 7c. On request of Aqua for All and PRACTICA, Het Waterlaboratorium participates in the Dutch research project aimed at improving the performance of the ceramic pot filter and establishing good quality control procedures in their production

Introduction

“Why is it so hard getting safe water to the poor – and so profitable to sell it to the rich?” This is the subtitle of the very readable publication entitled “Marketing safe water systems” by Urs Heierli¹. Indeed, it often proves difficult to develop sound marketing strategies to bring safe water systems to the poor. The PRACTICA Foundation, a Dutch NGO, is seeking to stimulate the widespread introduction of Ceramic Pot Filters (CPFs) as a reliable household water treatment and safe storage technology. In cooperation with Aqua for All, research is being carried out in order to provide a better scientific base and quality assurance practices for CPFs (until 2008, no peer-reviewed publications concerning CPFs were available!). It was also felt that the publication of a field note covering the most important aspects of establishing a good marketing plan would help existing or new CPF enterprises to sell and dispatch ceramic pot filters and to prevent the recurrence of past marketing mistakes.

The ceramic pot filter was first developed in 1981 by Dr. Fernando Mazariegos at ICAITI (Instituto Centroamericano de Investigación y Tecnología Industrial) in Guatemala, with financial support of the InterAmerican Development Bank. Design and production of the filter were taken further by several NGOs. The American NGO Potters for Peace² has played a key role in the diffusion of the CPF technology, with the late Ron Rivera being its principal “prophet”.

The filter has been produced in several countries, including Nicaragua, El Salvador, Guatemala, Honduras, Cambodia and Ghana, for some time now. More recently, CPF projects have been started in Cuba, Colombia, Mexico, Bali, the Dominican Republic, Ecuador, Iraq, Sri Lanka, Myanmar, Yemen, Kenya, Tanzania, and Benin, with varying success. From these introductions, whether successful or not, lessons have been learned regarding the establishment of ceramic pot filter enterprises and their marketing strategies³. Three of the four main points learned were marketing related:

- Experience with marketing and health promotion activities significantly increases the chances of success of setting up a ceramic pot filter enterprise.
- It is critical to understand local situations.
- The level of initial funding is not as critical as having a sustainable marketing plan.

The fourth lesson focuses on the availability of technical support and states that most successful water filter facilities have had extensive technical support from numerous partners, such as Potters for Peace and universities, to guarantee the quality of the filters produced.

¹ Safe water systems, why it is so hard to get safe water to the poor and so profitable to sell it to the rich, Urs Heierli, 2008

² www.pottersforpeace.com

³ “Filter Production Facility Best Practices”, D.S. Lantagne, 2006

In light of these lessons, it is remarkable that most available information regarding the ceramic pot filter is focused only on the technical issues surrounding the filter and its production. These issues are certainly very important, as the filters can only effectively purify water if they are produced correctly. However, considering the examples mentioned above, one would expect at least a similar number of documents available on marketing issues, but this is not (yet) the case. Therefore our aim is to give anyone working with ceramic pot filters a short introduction to several marketing issues that should be monitored when setting up a ceramic pot filter enterprise.

Marketing Planning

When setting up any organization that aims to produce and sell a certain product, one inevitably comes into contact with the field of marketing: the management process through which goods and services move from concept to customer, based on a consideration of customer needs and their satisfaction.

Marketing differs from selling because *"Selling concerns itself with the tricks and techniques of getting people to exchange their cash for your product and is not concerned with the values that the exchange is all about. It does not, as marketing invariably does, view the entire business process as consisting of a tightly integrated effort to discover, create, arouse, and satisfy customer needs."*⁴

Satisfying those customer needs means that before one starts to sell products, one first must understand what those needs are and how the enterprise will be able to fulfill them. The process of identifying customer needs and how to fulfill them while generating an acceptable level of return is called marketing planning and serves not only to plan marketing activities but also to assess the chances of success of any market introduction.

Marketing planning should be carried out for any type of product, company and market, including ceramic pot filters. The marketing plan generally includes an analysis of the current market situation and detailed action plans, budgets, sales forecasts, strategies, and projected (proforma) financial statements. An analysis of the current market situation should not only cover certain external aspects of the organization that is being established, focusing on local circumstances and the target market, but also covers an analysis of the internal organization.

Marketing specialists^{5 6} advocate that companies should follow a strategic approach in marketing planning with the aim of adapting the organization to the local market circumstances so it is able to best serve its customers. Based on frameworks advocated by these specialists, figure 1 illustrates the content of this current field note. It is important to note that external and internal analyses form the basis for the last and most important step, the creation of a marketing strategy.

⁴ Theodore C. Levitt, emeritus professor of marketing Harvard Business School

⁵ Strategic Market Management, Aaker, 2007

⁶ Strategic Marketing, K.J. Alsem and D. Wittinck, 2006

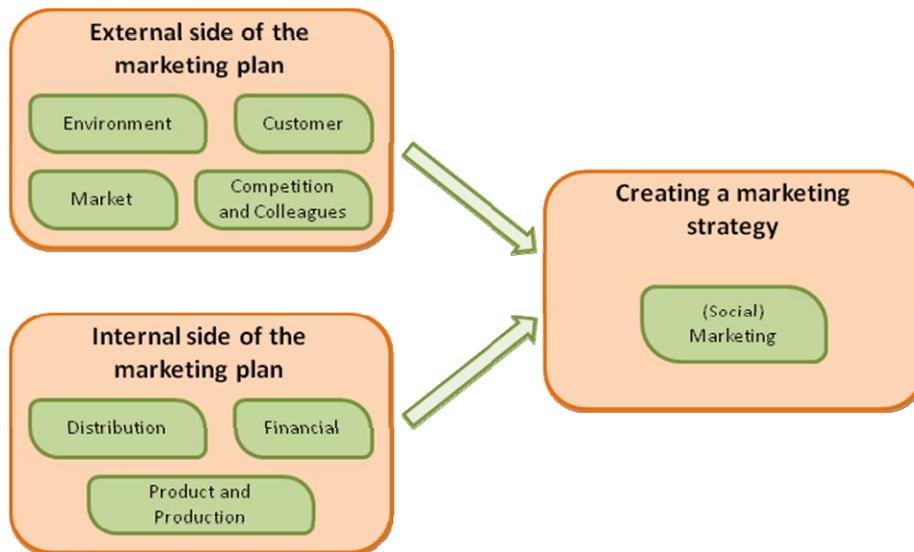


Figure 1: Developing a marketing strategy

1. Marketing planning: external aspects

The marketing literature advocates designing the organization around the preferences of future buyers. To produce and deliver ceramic pot filters to the target group, one first needs to understand what these preferences might be, where they originate and what circumstances surround them. An external analysis, therefore, focuses on assessing things such as the potential environment of the ceramic pot filter enterprise, the local water market being targeted, and the types of possible customers, before one starts producing filters.



The Environment or Context

As countries and cultures differ, the country or area where the project will be located will have implications for setting up a CPF factory. Understanding local circumstances has proven to be critical for waterfilter projects and a number of filterfacilities have failed, because local circumstances were not considered before implementation⁷. In Bangladesh, for example, the filter did not address a critical waterquality parameter, whereas in Sri Lanka and Mexico, government approval of the selected sites either prevented the establishment of the factory, or forced the facility to move. To prevent these situations from occurring, an important first step in marketing planning focuses on assessing what specific circumstances are at stake in the target area: the environment or context analysis.

Environment or context analysis can consist of a wide range of matters, and the elements that are essential to include in the marketing plan depend on the area in question. However, according to widely accepted marketing theory⁸, the analysis should at least include components such as the technological environment, the government, and local economical, cultural and demographic aspects.

The technological environment includes drinking water technologies available in the country in which the ceramic filter is to be positioned, the availability of knowledge, technology and raw materials for filter production and the possibilities for marketing, promotion, sales and after-sales. Drinking water technology relates to the supply of drinking water, which can be either by piped systems, (deep)wells and improved sources, (communal) rainwater harvesting or open and unprotected sources such as rivers and ponds. The quality of the water that is acquired through these sources determines the position of the ceramic filter in the market. For the production of the ceramic water filter, the presence of medium- and large-scale ceramic industries indicates the presence of knowledge, production technologies and raw materials. Possibilities for producing or importing the plastic parts of the filter should also be considered. Finally, the marketing and sales technology

⁷ "Filter Production Facility Best Practices", D.S. Lantagne, 2006

⁸ Strategic Market Management, Aaker, 2007

includes the use of (mass) media and the infrastructure available to support distribution and after-sales services.

The governmental and local economical environments are about assessing trends in the local area's development. What are the governmental trends in development of drinking water facilities? If household water treatment systems do not fit within a government's local policy, the filter probably is not a suitable product for the area. Similarly, it is important to be aware of the local current and future programs of major NGOs and the possibility of incorporating the filter into these plans. Because setting up a production facility requires long-term investments, a certain form of stability in the government's policies or economic growth as well as increasing purchasing power on the part of individuals can be of great importance for the enterprise's success.

The cultural and demographic environments of a potential project can provide helpful insights into the development and dynamics within local communities. What are local customs that can be of importance to water usage or in selling the filters? What are the habits of the population with respect to drinking water? To what extent is the target population aware of problems with untreated and unsafe drinking water? Would household water treatment and storage, as achieved with the ceramic water filter, fit in with normal practices? Is there a tradition of using ceramics for treating or storing drinking water? And, in a wider perspective, how are the local communities built up in terms of demographics? An important insight in Cambodia, for instance, is the fact that the population is growing and almost half of the population is younger than 22 years old⁹ and 33% of the population is under 14. This information gives insights into how one can reach certain portions of the population, for example through schools. Moreover, as in Cambodia most parents are poorly educated and it has become common to value the opinion of the educated children in family decisions, education in hygiene and water management in schools can be a successful tool for teaching a large part of the Cambodian population about water filters.

The Market

Another important aspect of marketing planning is to get an idea of the size and characteristics of the market one will be targeting, so that a ballpark figure for forecasting sales and income can be obtained. Current ceramic pot filter sales around the world show that there are two important markets for the filter.

NGOs

A first category of market consists of non-governmental or aid organizations (NGOs) that aim to supply safe water to those who are deprived of it. Ceramic pot filter enterprises produce filters and sell them directly to NGOs, which then distribute these filters to end-users. Usually, the NGOs incorporate the filters within their own water and sanitation campaigns, distributing the filters to local villages at a subsidized price. Although some NGOs choose to hand out filters for free, this practice should be discouraged, as research has shown that this

⁹ CIA factbook, 2008

does not lead to sustainable usage¹⁰. The NGO market has proven to be an important market for ceramic pot filter enterprises because they usually generate the majority of filter sales, especially in the early years of CPF enterprises.

National water and sanitation meetings and networks have proven to be very useful tools to reach potential NGO buyers and to form partnerships with them. Therefore it is wise to, at an early stage, make an inventory of the number of NGOs active through these networks and their possible interest in buying the filters when they become available.



End-users

The second market segment that is commonly served by ceramic pot filter producers consists of the end users themselves, and one therefore needs to estimate the size of this market. To get information of the potential of this market one needs to gain insights on the number of people that will buy a filter. Although theoretically in some countries almost all inhabitants could benefit from the ceramic pot filter, it is not realistic to expect that the whole population will have an interest in having one. Therefore, the potential market will probably be smaller than the total population of the country in which one intends to produce and

sell the filter. Then, of all the people having an interest in buying the filter, it may be that not everyone can afford the filter. The part of the potential market that can afford the filter is called the available market and the available market consists of all the people to whom one can potentially sell a filter. However, the available market in turn probably consists of many different people with varying preferences and needs. In marketing planning, it is common to analyze the characteristics of these groups in terms of location, demographics, or lifestyle to select one or several homogeneous groups that are more likely to buy or benefit from the filter: the target markets.

¹⁰ Independent Appraisal of Ceramic Water Filtration Interventions in Cambodia, Joe Brown and Marc Sobsey, 2008



Figure 2: Selecting the target market

Customers

The customers are the end users of the filter. They are the target market: the people who will either buy the filter themselves, or receive a filter through a subsidized programme or partner NGO (the NGO market). Knowing these people and their customs, lifestyles and preferences is arguably the most important aspect when selling or distributing the filter. The ultimate goal of producing the filter is that people will use it and will thereby improve their health and quality of life. To attain this goal, potential users who are currently accustomed to boiling their water or not purifying it at all, will have to change their behaviour and start filtering water. This change in behaviour can be hard to achieve, as the users need to understand the importance of using the filter. In marketing/ behavioural change literature, this is usually explained in an equation that states that *people will only change their behaviour if the perceived effort (both economically and psychologically) to change this behaviour is smaller than the perceived benefits of the new behaviour minus the perceived benefits of the old behaviour*¹¹.

Thus, in order to have someone buy and/or use the filter, one needs to know the person's prior behaviour, the effort it will take them to change their behaviour and the benefits that filtering their water will offer them. This process may lead to possible adaptations of the filter or perhaps tailoring the marketing campaigns that promote the filter to this equation, or in other words, to better suit the situation of the potential customers.

Because prior behaviour and the benefits that the filter offers can differ between various groups of people, it is sometimes necessary to identify these distinct groups and to address them separately, using different arguments. For instance, for people that do not treat their water at all, the main advantage of the filter lays in the health benefits resulting from using the filter and therefore marketing should focus on health and health education. However, people who boil their drinking water already have access to clean water and the main benefits the filter can bring them are savings in time and money.

This method of distinguishing and approaching different groups of customers within a market is called segmenting and it helps to improve the effect of marketing campaigns on different target markets. Furthermore, an organization may choose to only focus on one group of customers, for example, only people who drink non-treated water. The aim of the

¹¹ PDMA Handbook of New Product Development, Kenneth B. Kahn, 2005

organization would then be to try to define this group and tailor a campaign to their particular situation

Advantages of filter use

- *Safe drinking water with storage capacity in the kitchen*
- *Potentially cheaper and faster than other water treatment techniques such as boiling or chlorination*
- *Fewer health problems for the users and therefore lower costs associated with health care*
- *Simple to use and maintain*

Colleagues and Competitors

Local water and sanitation organizations can be helpful in identifying and reaching potential NGO customers when a CPF enterprise is being established. Not only is it important to find potential customers in one's location, it is also important to get in touch with potential colleagues or partners who can help with advice, as well as competitors whose offers may have to be met. Should there be more than one filter producer in an area, they can choose to cooperate. This can be done to share knowledge, for example, or to gain economies of scale by combining production. The latter took place in Cambodia between International Development Enterprises (IDE) and the Cambodian Red Cross. Cooperation could also work well when rolling out a national marketing or education campaign focused on water filters in general. A campaign aimed at a specific brand of filter may also generate positive attention to the product group (ceramic pot filters) and even on other means of purifying water, to their mutual benefit.

Although the goal of producing ceramic pot filters is probably not a purely commercial one and its purpose is generally not to compete with other home water treatment systems, there may be other purifying products such as chlorine tablets, sand filters, etc, also available on the local market. In that case, it would be important to assess the prices, benefits and drawbacks of these products compared to the ceramic pot filter.

For a successful introduction of the ceramic pot filter alongside these other products, the price of the filter must be lower than the price of competing/ substitute products, or else it must be perceived as having a higher value by potential customers. If this is not the case, potential customers are more likely to buy a competing product.

Summary

This chapter has described a company's environment, market, customers, colleagues and competitors as important external aspects that should be assessed for ceramic pot filter marketing planning. As inputs for the marketing plan, these aspects are important indicators of the potential for successfully producing and selling ceramic pot filters in a certain country or area. However, an attractive external environment alone is not a guarantee for filter success. The next step is to tailor your organization's specific qualities to best serve the environment in question. Therefore, the next chapter focuses on the critical internal aspects of marketing planning for the marketing of ceramic pot filters.

2. Marketing planning: internal aspects

Tailoring your organization to a customer's preferences also means analyzing and adapting the enterprise to these local circumstances. Therefore, this chapter focuses on the marketing aspects surrounding the organization itself: what are critical internal aspects relating to the marketing of ceramic pot filters?



Product and Production

The ceramic pot filter consists of two main parts, a ceramic filtering element and a receptacle. The filtering element is the part that is usually produced by the CPF producer, whereas the receptacle used can either be ceramic or plastic, bought from an external supplier. Because the receptacle is the outside of the filter, it determines the look and feel of the filter, as shown in the pictures below. From a marketing perspective, it is therefore probably the most important part of the filter: people must like its look in order to buy it. Moreover, when targeting different groups of people, the receptacle is the part that can differentiate the product most easily. For example, one could sell models with a simple, basic receptacle to people with a low income and models with a fancier receptacle to people who have a higher income. Also one could choose to sell different models to partner NGOs than directly to the market, to ensure a visible distinction between them. NGOs tend to distribute filters differently and for a lower price, which can cause offense to people needing to pay more for their filter. A distinction between these products could help to justify these differences in the eyes of potential buyers.



Production of CPFs is similar to the production of other ceramics: clay powder is mixed with water and a burn-out material, after which the clay is pressed into the pot shape, dried and fired. The final filters are tested for flow rate and silver is applied to the filters. The production process of the ceramic water filter is further described in production manuals such as the manual from

Resource Development International Cambodia (RDIC)¹² or Potters for Peace¹³. As the filter is sold and used as a health tool, quality control is essential in the production process. Flow rate testing of the final product is not enough to guarantee that the filter meets the criteria for bacteria removal. To make sure that all final filters will perform equally well, quality control must be an integral part of the entire production process in which raw materials and the different production steps are fully controlled.

To gain the confidence of end users and implementing NGOs, it is highly recommended to ensure that a quality control plan is fully in place before starting the production of filters: as individual filters are not tested on their bacteria removal efficacy after production, the quality control system is the only guarantee to end users that the filter is performing according to set standards.

Financial planning

A marketing plan usually includes a financial plan to explain how the enterprise can finance its marketing and distribution. As with every company, enough income must be generated to justify expenses.

For filter enterprises, there are several options that can be used as business models that differ in their budgeting and the way they are funded. For example, filter production enterprises of certain large NGOs such as the Red Cross are totally dependent on donor funds. On the other hand, there are also filter production facilities that generate their own income through the sale of the filters, while using donor funding only for promotion of their product and health education programs. Both possibilities have benefits and drawbacks, as income dependent on donor funding usually means a higher (starting) budget and a lower selling price, but also a constant search for new donors. Income generated from sales can make it more difficult to subsidize the product for poorer people, but is more sustainable over time as the enterprise can become self-sufficient. Whichever business model one chooses, the most important thing is to have thought the whole process through and have a sound financial and marketing plan for an extended period of time. Or, as Lantagne¹⁴ put it: *“The actual establishment of the filter facility with the appropriate equipment is not that expensive, and can be done on a shoestring budget. The critical factor to success is not a large amount of income at the outset, but instead a good marketing plan to create a sustainable filter facility, with program income paying the workers, providing marketing support, and working to expand the project”*.

Distribution

To allow potential users to obtain CPFs, producers not only need to manufacture the filters, but they also need to make sure the filters reach potential users. In other words, distribution channels are needed. As mentioned above, most existing filter producers supply two distinct markets, an NGO market and an end-user market. Each of these markets need some sort of distribution system.

¹² www.rdic.org

¹³ www.pottersforpeace.org

¹⁴ “Filter Production Facility Best Practices”, D.S. Lantagne, 2006

The influence of social marketing and distribution on filter adoption in Cambodia^a

In 2008 a research was conducted on the influence of social marketing on ceramic pot filter adoption. As part of this research, a survey was held among 129 CPF user and non-user households in two areas in Cambodia. In one of these areas, the ceramic pot filter was sold at cost price through a retailer and marketed in a rather commercial way using radio advertising, focusing mainly on the product itself. In the other area, the filter was sold door-to-door for a more subsidized price and promoted with a strong emphasis on health education and changing behaviour.

The results of this survey showed that the door-to-door selling with a strong focus on education led to villagers being more aware of water-related hygiene. They also discussed the filter among themselves and urged each other to buy one. However, the more commercial approach with local retailers selling the filter led to better perception of the filter's quality and distribution.

Furthermore, the study showed that both approaches led to people advocating the product as being good and useful, even though they did not all buy or use the product for various reasons. However, for the people that actually bought and used the filter, their awareness of hygiene and especially their perception of product quality and distribution proved to be instrumental in making that decision.

NGO market

Of the two markets, distribution to the NGO market is usually the most simple to organize. NGO buyers usually intend to use the filters in one of their campaigns focusing on improved water, sanitation or health and will mostly take care of the distribution of the filters themselves. Therefore, a direct sales approach may be appropriate, in which the NGO buys the filters directly from the filter producer, collects the filters from the factory themselves and then distributes them in a selected area.

Although these sales through NGOs are important to keep up the production scale of the filter factory and represent an easy form of distribution, the CPF enterprise should get actively involved in the distribution planning to prevent possible difficulties. One of the things that should be discussed with the distributing NGO, for instance, is the filter price. A study by Brown and Sobsey¹⁵ in Cambodia showed that persons being given a filter for free are less likely still be using that filter after a certain time period than those who have actually paid for the filter. Filter producers such as IDE in Cambodia, therefore, urge their partner NGOs not to distribute their filters for free but to set a (nominal, subsidized) selling price.

Another potential drawback one should be aware of when selling to an NGO is cannibalization of NGO sales by direct market sales. NGOs that buy and distribute filters often use these filters in hygiene, water or sanitation campaigns; if they indeed sell the filters, their (subsidized) price is usually lower than the cost price. If the CPF factory also sells filters through retailers in the same area, they must be aware that this will probably influence local sales and price perception. Furthermore, households that could afford to buy a ceramic pot filter might delay their purchase decision in the hope of receiving a subsidy at some point¹⁶. Therefore it might be better to find

¹⁵ Independent Appraisal of Ceramic Water Filtration Interventions in Cambodia, Joe Brown and Marc Sobsey, 2008

¹⁶ Safe water systems, why it is so hard to get safe water to the poor and so profitable to sell it to the rich, Urs Heierli, 2008

locations for NGO campaigns away from retailers, or use differentiated products for NGO sales and retailer sales.

A final point of discussion with potential partner NGOs is after-sales service. As the filters are consumer goods that are used over a longer period of time, they require maintenance and/or spare parts. The ceramic pot is especially at risk of breakage over time and could therefore need replacement¹⁵. With filters that are sold directly to the end-user market, the user can come back to the retailer to buy spare parts. However, NGO filter campaigns often choose to sell or distribute the filter “door to door” or “off the truck”. In these cases, a plan should be made for after-sales services to encourage sustainable use of the CPFs.

End-user market

Selling to the end-user market usually takes a bit more effort, as one needs to reach people who live all around the country. Therefore, one not only needs to produce the filters at the factory, but also take care of transportation of the filters, local sales, and provide some sort of after-sales service, so that users can buy spare parts.

Several strategies have been used for selling the filters, e.g., from door-to-door selling in selected villages, travelling to markets to give demonstrations, selling through school(teacher)s, and selling through local retailers. All these strategies have their pros and cons and their suitability depends on local circumstances. For instance, selling door-to-door is relatively easy to arrange and cost effective. Having schoolteachers do the door-to-door sales would add to the credibility of the filters, as in many countries teachers are respected community members. However, schoolteachers are not necessarily good or willing businessmen, and door-to-door selling is difficult to combine with after-sales services. Selling through local retailers makes it easy to deliver the after-sales services and would seem to be the most sustainable approach¹⁷, but setting up a retail network can take much time and effort.

Regardless of which distribution strategy or combination of strategies is chosen, it is critical for success that the filter producer has thought thoroughly about the best way to sell the filters and has developed a sustainable marketing plan around this approach¹⁸. The adoption of filter use in Cambodia suggests that the best theme for this marketing plan is to focus on health. In Cambodia, filter producers come to villages and markets to educate people about health and sell the filter at the same time. Retailers selling the filters usually have a link with health (pharmacies) or food (grocery stores).

^a The influence of social marketing on adoption of social innovations: A dyadic study on ceramic pot filters, Stuurman, 2009

¹⁷ The influence of social marketing on adoption of social innovations: A dyadic study on ceramic pot filters, Stuurman, 2009

¹⁸ “Filter Production Facility Best Practices”, D.S. Lantagne, 2006

Summary

This chapter has described how CPF production, financial planning and distribution are the important internal aspects that should be considered in order to optimize the attractiveness of the product. Combining external aspects of marketing with these internal aspects should give a good impression of the chances of filter success in a specific area. Now it is time to use these insights to create a marketing plan.

3. Creating a marketing strategy for ceramic pot filters

If the external surroundings in a certain area seem conducive to distributing CPF filters and one expects to be able to establish a filter factory in the area based on the internal marketing aspects, it is time to create a ceramic pot filter marketing strategy. The aim of the marketing planning is ultimately to convince potential users to buy and use filters. Therefore, this chapter introduces social marketing as a specific field of marketing that has proven to be best suited for the marketing of ceramic pot filters.



Social Marketing: the principle and how it works

The history of Social Marketing

The principle of Social Marketing originated at the end of the 1960s with the work of Kotler and Levy^b and Kotler and Zaltman^c. In recent years, the field has gained popularity and many publications and conferences are currently devoted to the practice of social marketing.

In practice, we have seen signals of the growth of social marketing: there have been World Bank and UNAIDS campaigns, requests for proposals for social change programs by nonprofit organizations and interest by major consulting companies^d.

Getting people to use the ceramic pot filter means getting them to change their behaviour: they would need to filter their water instead of boiling it or not treating it at all. According to Urs Heierli and several general marketing experts and researchers^{19 20 21 22}, social marketing is a powerful tool for changing this behaviour. Social marketing can broadly be described as the application of marketing principles and exchange to social issues²³. It therefore means using the core marketing principles, *product*, *promotion*, *place* and *price*, to target the people that boil their drinking water or do not treat it at all.

Social marketing follows the same core principle that was defined by Kotler and Keller in 1967: "*All marketing decisions must emanate from a consideration of the target customer*". People will not start filtering their water because we tell them to do so, but they need to make this decision themselves. Therefore, if we want to influence that decision, we need to think from the customers perspective and provide them with the information they need to make this decision and to help them by making it as easy as possible

¹⁹ Social Marketing, Strategies for Changing Public Behaviour, Kotler and Roberto, 1989

²⁰ Social marketing, Improving the Quality of Life, Kotler, Roberto and Lee, 2002

²¹ Marketing Social Change, Andreasen, 1995

²² The influence of social marketing on adoption of social innovations: A dyadic study on ceramic pot filters, Stuurman, 2009

²³ Social marketing, Improving the Quality of Life, Kotler Roberto, N. and Lee, N, 2002

^b Broadening the Concept of Marketing, Kotler, Philip, Levy, Sidney J. in *Journal of Marketing* 33, 10-15, 1969

^c Social Marketing: An Approach to Planned Social Change, Kotler, Philip, Zaltman, Gerald in *Journal of Marketing* 35, 3-12, 1971

^d Marketing social marketing in the social change marketingplace, Andreasen, A.R. in *Journal of Public Policy and Marketing*, vol. 21 No. 1, pp 3-13, 2002

to act on this decision. The harder it is for an individual to make and act on a decision, the less likely it is that he or she will do so.

With social marketing, consumers are influenced to change from an adverse idea to a better one, or to adopt new ideas altogether. The new behaviour and the tangible product that facilitates the change in behaviour are marketed at the same time in a social marketing campaign. Together, they form the social product that is marketed, as illustrated in figure 3.

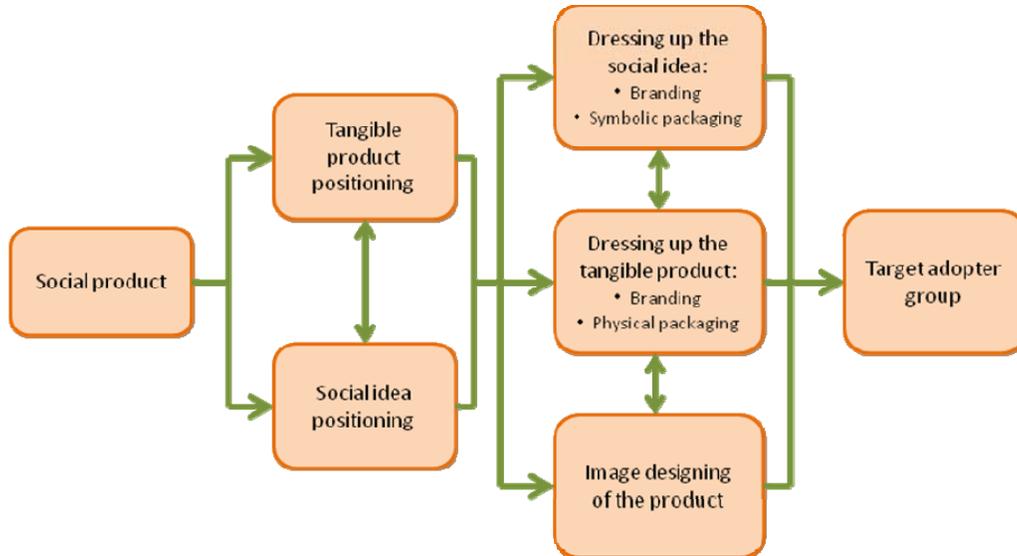


Figure 3: Social products with a tangible product base¹⁹

When considering the marketing principle that we must think from a customer’s perspective, we must make sure that the principle of filtering water with the ceramic pot filter fits the preferences of the target market and –if possible- fits them better than competing products. Because this fit determines the value of the filter for the target adopters, it greatly influences the potential of the social marketing campaign. However, attaining a good product market fit requires much effort, as it is very often the case in social marketing that the target market does not perceive that there is a problem or situation needing change.

Social marketing for the ceramic pot filter

To apply the principles of social marketing to CPF production, one should first assess the fit between the social product and the area where one intends to sell and distribute the filter by answering the next question: is the ceramic pot filter the best or a suitable solution for this area and is the area suitable for setting up a ceramic pot filter enterprise? Although this questions may seem to be a logical first step, a number of filter facilities have failed because local circumstances were not considered initially by the implementing organization, resulting in a poor fit between the filter and the specific area of introduction²⁷. If the ceramic pot filter seems suitable for the area, the next step is to create a social marketing plan that incorporates both promoting purifying drinking water and the ceramic pot filter. As described in the first two chapters, all

available information should be included to form the input of this strategic plan for selling the CPF in a specific area.

Marketing the social idea: purifying water

As we stated in the introduction, people will not start filtering their water just because some NGO tells them to do so, but they need to make this decision themselves. A ceramic pot filter enterprise should understand this and start by teaching their potential clients about water and hygiene, to make people understand how untreated water can be harmful and cause diarrhea. This aspect should not be taken lightly, as most of the people that can benefit the most from the filter do not know much about hygiene and probably have not had much education. An approach proven to be successful in Cambodia was developed by Recource Development International (RDI) and makes use of puppets and karaoke to explain about the dangers of unpurified water and the solution that the ceramic pot filter offers. Through this approach, RDI successfully reaches poorer people who are not accustomed to boiling their drinking water. This approach is a very good example of a campaign tailored to the local market, as karaoke is very popular in Cambodia and the songs and music draw whole families to markets or central squares when RDI comes to campaign. Moreover, because children and their families join in the singing about hygiene, they remember the lessons better than when they experience advertisements²⁴.

Filter success in Cambodia through varying approaches

With three independent filter production facilities - RDI, IDE and the Cambodian Red Cross - producing and distributing over 60.000 new filters each year, Cambodia has proven to be a real success in the diffusion of household water treatment systems. By now, over 200,000 filters have been distributed, of which 150,000 are still in use and benefiting a population of 750,000 individuals^e.

It is interesting to note that the three filter producers are operating alongside each other, while all have a different focus and strategy. RDI focuses most on the social aspects of the filter and on health education, IDE distributes using a more commercial approach through local distributors and retailers that all earn a living through the filter, while the Cambodian Red Cross is more help-oriented, with projects for the Cambodian government and army.

Another successful approach that is used in Cambodia is to include schools and teachers in teaching about hygiene and drinking water. In this approach, campaigns are held at schools during which children are taught about the dangers surrounding unclean drinking water and schools receive free filters so that people can sample filtered water. Teachers are sometimes allowed to sell filters at school; because they are respected members of the community in Cambodia, their positive attitude towards the filter influences others.

²⁴ The influence of social marketing on adoption of social innovations: A dyadic study on ceramic pot filters, Stuurman, 2009

^e Safe water systems, why it is so hard to get safe water to the poor and so profitable to sell it to the rich, Urs Heierli, 2008

Marketing the product: the ceramic pot filter

Apart from addressing the need to filter the water, a ceramic pot filter enterprise is of course also responsible for the marketing of the filter itself and therefore should take care of the design of the filter, distributing it, promoting it, setting a price for the filter.

As explained in chapter 2, there is a general design of the filter that is used in most of the countries in which it is produced. However, there are various choices that can be made regarding the receptacle and tap. The golden rule is that these choices should be made based on what best suits the local market and what potential customers would most like to have.

The filter's promotion, distribution and price should also be adapted to local circumstances. Interesting lessons can be learned from the national roll-out of the ceramic filter by IDE in Cambodia. In 2002, IDE started a production facility for the ceramic pot filter and used its first production batches to establish test markets in cooperation with a number of NGOs in several areas of Cambodia. Each area was located a considerable distance away from the other markets and each market was characterized by the use of different pricing and distribution. The prices varied from totally subsidized to fully priced and distribution consisted of door-to-door selling, NGO distribution, or selling through retailers.

From this early test, IDE learned that it was a viable option to sell the ceramic pot filter for the full price through retailers, while using subsidies and donor funds entirely for promotion and health and hygiene education, and the cost for distributing filters could be kept relatively low. With this lesson, IDE chose for a rather commercial marketing strategy. This focused on filter sales at cost price through distributors and retailers, which are mostly pharmacies and grocery stores, that make a small profit on each filter. At the same time, IDE has broadcasted local radio and TV-commercials for promotion of the CPFs. Furthermore, IDE keeps selling filters to several partner NGOs in order to reach poorer Cambodians. With this approach, IDE manages to sell over 10,000 filters a year through private retailers and almost double this number to partner NGOs.

A benefit of this approach is not only that several distributors and retailers can make a living through the ceramic pot filter, but also that through the distribution network that will be created, users can always come back for spare parts. This had previously been seen to be a big problem with door-to-door selling and NGO distribution of the ceramic pot filter²⁵. Thus we see that when funds allow setting up test markets as IDE did, this can deliver very valuable information.

²⁵ The influence of social marketing on adoption of social innovations: A dyadic study on ceramic pot filters, Stuurman, 2009

4. Conclusions: Making a success of the CPF

The success stories described above serve to underline the fact that it is important to seriously consider the marketing aspects of CPF production. This has not always been done before, which has led to mistakes and failures during market introductions of the CPFs in some places. Focusing on local circumstances and preferences and tailoring one's organization to these circumstances in order to produce quality filters that are effectively distributed should significantly increase the chances of success for any potential filter enterprise. We hope this document makes its readers think about marketing as an essential aspect of setting up a ceramic pot filter enterprise, because producing a filter is one thing, but it will only benefit the user if he or she really uses it.

Informative websites and further reading.

www.ceramicwaterfilter.org

Website of the international ceramic pot filter community

www.pottersforpeace.com

Website of an NGO focused on ceramic pot filter containing various reports and studies and handbooks on both marketing and technical aspects ceramic pot filters

www.poverty.ch/safewater

Research report of Urs Heierly on marketing of household water treatment systems

www.rdic.org/waterceramicfiltration.htm

Website of producer of ceramic pot filters in Cambodia containing a detailed production handbook

www.ide-cambodia.org/cwp-retailer-location.htm

Website of producer of ceramic pot filters in Cambodia containing the Independent Appraisal of Ceramic Water Filtration Interventions in Cambodia, Joe Brown and Marc Sobsey, 2008

www.practicafoundation.nl/services/publications/background-documents/

Report on the influence of social marketing on adoption of social innovations: A dyadic study on ceramic pot filters, Stuurman, 2009