

NAANDI COMMUNITY WATER SERVICES (NCWS)

Naandi.org

Distribution of purified water through a village kiosk network in India



KEY MARKETING, SALES AND COMPLIANCE INNOVATIONS

- **Offering a simple but committing service helps ensure compliance.** NCWS sells water via monthly pre-paid cards with a fixed validity (30 cans, valid for 30 days), which incentivizes users to come and consume their allotted daily volume of safe water (supply days not used are lost after the validity is over. However, within the validity period, the user can take the lost day's quantity).
- **Purchase is triggered by free trial at launch for sufficient time.** Wherever possible, NCWS starts operating the Water Center at a small scale before the official launch for those who are interested in trying the water. The Water Center Assistant (WCA, i.e., the Water Center operator) is supposed to follow up with these families to make sure they consume NCWS water consistently during this trial phase to reap the benefits of clean water. Typically 50% of those who benefit from this free first trial stay with NCWS and decide to buy NCWS water after the free trial period.
- **High penetration rate and compliance is ensured by involving communities at each stage of the project.** Pre launch: a Water Center is only established when there is considerable awareness and education activities (door to door and group meetings on the importance of safe water etc.), to ensure that a large share of the village is willing to pay for the service. At launch: Local leaders do speeches, and NCWS makes sure that at least 100 (and optimally 200) people attend. Post-launch: Once the Water Center is built local promoters continue the education and promotion work for a few months. Past this time, the WCA keeps track daily of usage patterns and volumes, which allows spotting drop-outs. NCWS Territory Officers (in charge of overseeing 10-15 Water Centers) then regularly visit customers, and in particular the drop-outs, to understand why they stopped using the product and re-enlist them if possible
- **NCWS uses incentives to overcome seasonal drops.** In winter, the number of cards sold typically drops by 15-20% (not because of dropouts but mostly because several households share a card instead of each buying their own, as household members drink less). To avoid this drop, one of NCWS region offered free participation to a lucky draw for a gold coin to all households who used their monthly card completely (i.e., for 30 cans in 30 days) during the winter months. With this system, there was no reduction in the number of cards sold during these months.

PROJECT DESCRIPTION

History of organization

Founded in 1998, Naandi, which means “a new beginning” in Sanskrit, is one of the largest and fastest growing social sector organizations in India working to make poverty history. Naandi aims to build sustainable models within the social sector that deliver critical services efficiently and equitably to underserved communities. They focus on child rights, sustainable livelihoods and safe drinking water. Naandi has more than 400 employees and hundreds of community workers working in 13 states of India, helping more than 1 million underserved people.

Naandi began providing safe drinking water to communities in 2005 with a single mission to improve life and health of people and communities by giving access to healthy water every day through installation of community owned safe drinking water projects. Naandi's community safe drinking water programme installs and operates water centers that can reliably and cost-effectively address water contamination issues. On the path of sustainability Naandi set up an implementation organization, Naandi Community Water Services Pvt. Ltd. (NCWS), which became in 2010 a social for-profit venture between Naandi Foundation and danone.communities. NCWS carries out the technical aspects of the work and brings the best expertise to assembling and installing the water treatment unit, ensures that the output water meets Indian water quality standards,

addresses operational issues, and manages user fee collection. Naandi plays a facilitator role, ensuring overall coordination, organizing financing, community mobilization and sensitization. Financing of the Water Center is done through a mix of grants (donors include Frank Water, Global Water Challenge, Uranium Corporation of India Ltd (UCIL), Bharat Dynamics Ltd (BDL) and Rural Electrification Corporation Ltd.(REC)), village contributions (by individuals or communities) and state authorities' investments (over 300 Water Centers installed to date are financed by the Government, including via tenders). In any case, the village has to provide the premises in good state (leveled, cleaned of shrubbery etc.), a water source and the electricity connection (each of these entails expenses, e.g., the electricity connection will need a deposit which the panchayat arranges for). The model was replicated in 5 Indian states (Andhra Pradesh, Karnataka, Rajasthan, Haryana, and Punjab) and was in 2010 the largest non-governmental water provision scheme of the country.

Since its incorporation as a social business, NCWS has reorganized its activities for improved sustainability by increasing penetration through better distribution channels, expansion to new areas, price hike, providing cans in smaller quantities and increasing the validity period wherever requested, handing over some Water Centers to the community and consolidating operations by "clusters" of 35-50 Water Centers within a limited area, easily overseen by a limited number of staff. While previously NCWS would build a Water Center in any village where a donor was willing to provide the necessary funding, today NCWS only does so where Water Center operational sustainability is very likely to be achieved, i.e., where a target of over 250 regular household users is realistic. In August 2013, it counted over 416 Water Centers serving over 600k users (counting 1.8L/pers/day) and 2.1m potential beneficiaries (calculated as total villagers living in areas serviced by a kiosk).

Product/service offering and value proposition

NCWS offers purified water (under the brand iPure) for drinking or cooking at an affordable price, which represents approximately 2% of annual households budget (INR 0,1-0,2/L or ~ \$0.002-0.004/L). Customers buy a 30-day pre-paid card for a supply of 12 or 20L per day per household. "Supply days" not used during these 30 days are lost. For convenience NCWS sells at cost (INR 190 ~ \$3.2) 12L or 20L containers. 5 to 10% of users are getting water home delivered at on average 1 to 1.5 times the price at the Center.²

Promotion and compliance strategy

- Consumer life cycle management:
 - » Pre-launch: Strong awareness effort at the start with door-to-door in-depth interviews of potential consumers, and focus group discussions by NCWS staff.
 - » Launch: Celebration event with local authorities and communities. In most places, symbolic enrollment fees (of INR 1 to 10, or less than \$0.2) help create a sense of joining.
 - » Post-launch:
 - 1) Continuous village education through a Community Organizer, who enlists additional clients for the first 6 months
 - 2) Recurrent promotion and education activities demonstrate the link between safe water, hygiene and health and enroll new clients: 2 "focus activities" with 4-6 team members from NCWS per cluster (of 35-50 villages) per month, such as panchayat meetings, schools sensitization events, activities with SHG or primary health centers
 - 3) 8-10 smaller promotion activities per cluster with 1-2 NCWS team members, such as interacting with clients at the water center or visiting households, in particular to re-list drop outs and add new users
- Focus on continued service so that clients can access water whenever they need it
 - » 48-hour repair in case of machinery issues (a Basic Toolkit is available with the technician and critical spare parts are available at the cluster level. The WCA is taught how to do this basic maintenance, while NCWS technical experts are available in case of bigger issue – 1 per 15-30 Water Centers)
 - » Some water stock to be able to offer clean water even in case of breakdown (5,000-10,000L per Water Center, corresponding to 250 to 500 cans, or a couple of days of reserve)
 - » WCA from the village: everyone knows him or her which avoids any issue of absenteeism, as his or her neighbors would demand their water
- Compliance reinforced by the use of 30-day pre-paid cards (payable in cash at the beginning of the month; supply days not used are lost after the validity is over. However, within the validity period, the user can take the lost day's quantity).

³ In some Water Centers, there is no delivery taking place, while in a few others up to 50% of cans are home delivered every

day, at prices that vary depending on distance to the plant and can reach in exceptional cases 5 times the price at the plant.

CASE STUDIES

Sales and distribution

NCWS has a range of preferred suppliers for every component of the Water Center (buildings/ pre-fab, water tanks, machines, consumables), to maintain costs low and ensure flexible provision throughout the different states.

In terms of human resources, NCWS Water Centers have:

- 1 WCA per Water Center (2 if Water Center sells more than 250 cards/month) who operates the machine, sells the water and keeps track of sales. WCAs are selected by NCWS sales team (interviews and mathematical tests; basic qualifications required) after public advertisement and/or referral from the local authorities. Monthly salary can vary depending on seniority and sales
- 1 Community Organizer conducts 12 months of marketing activities (3 months pre launch and 9 months post launch)

They are supported by:

- 1 Territory Officer (TO) in charge of 10-15 kiosks doing bi-weekly to monthly checks, cash collection and promotion
- 1 Cluster Head (CH) in charge of 3-5 TOs, managing 30-35 Water Centers
- 1 State Head (SH), supported by a financial officer

Between 50 and 60% of customers come daily at the Water Center which is open 8 hours/day, early mornings and end afternoons. Others are supplied by local entrepreneurs or a daily home delivery service set up by Naandi which is picking up in most states, helping to increase penetration. Delivery fee is often equal to the price of the can (INR 2-3) and can go up to INR 12/can for remote clients.

Results

- **Scale:** In 2013, NCWS counted 416 Water Centers and over 600k consumers (2.1m potential). Older sites reach penetration of over 50% in their own village, and can be limited by Water Center capacity (1 Water Center can only produce enough water for around 300 households given low electricity availability).
- **Social impact:** Anecdotal evidence of impact on fluorosis, and lowering of diarrhea cases, clients saying “once you try NCWS Water, you cannot drink general water anymore” but no statistical survey conducted yet.
- **Financial sustainability:** At the kiosk level, break-even depends on the number of users, as well as the maintenance and electricity costs (today it requires around 280 users per kiosk). In FY2012-13, NCWS realized water sales of over \$800k in revenues (not counting individual revenues generated by delivery entrepreneurs), plus \$70k in can sales. While 100% of Water Center-level operational expenditures are recovered, other field costs and overheads are not. NCWS has improved its net margin by over 10 percentage points per year since 2010 and is moving towards sustainability, with sales growth of 7% and successful cost reductions of 3% in FY2012-13.

Future plans

- NCWS targets to cover 1,000 villages by 2017-18 (i.e., 2m consumers)
- Currently the main operational focus is on improving penetration rates (notably by encouraging wider distribution by way of hiring or purchasing transport for door-to-door delivery), and on reducing operational costs through better local operations of the machine. In addition, NCWS will close Water Centers that are not sustainable, and increase price wherever possible to improve its sustainability.

Exchange rate for this case study: 1 USD = 60 INR

Sources:

Field visits in Haryana with Haryana state head Bhanu Prakash on Aug 19, 2013, and in Andhra Pradesh with Durga Prasad V, South States Financial Officer, and Territory Officers, Krishna Murthy T. and Balaram K. on Aug 21, 2013. Interview with clients, TOs and cluster head.

Interview with Anoop Ratnaker Rao, CEO, Srinivasulu G, Head of Finance, and Surya Kiran Tatineni, South states Head, Aug 20, 2013

Naandi Water Community Services case study, *Access to Safe Water for the BoP*, 2011, Hystra, available online at:

www.hystra.com/safe-water

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