

# Searchlight

## SOUTH ASIA

TRACKING URBAN POVERTY TRENDS IN INDIA, BANGLADESH, NEPAL AND PAKISTAN

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### FEATURE

## Glass Half Full

### Solutions to India's urban water woes

BY NOOPUR DESAI

As on 2013, no major cities in India have 24x7 water supply. 80% of domestic water supply in India comes from groundwater. With the growing demand for water, ground water is increasingly being depleted. The country is also facing deteriorating quality of water. India ranks 120 out of 122 countries on the quality of potable water. Each year, water borne diseases impact 37.7 million people, 75% of this being children. 21% of communicable diseases in India are because of unsafe water. The economic cost of water borne diseases in India is approximately INR 24000 million (~US\$ 400 million). Further, the over dependence of groundwater has brought to surface contaminants like fluoride. Some experts suggest that nearly 66 million people in 20 Indian states are at risk because of excessive fluoride in the water.

CONTINUED INSIDE ▶

## FEATURE continued



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Access to water poses a huge challenge for India's urban poor. In one of south west Delhi's Manglapuri slums, a densely populated colony of [over 2000 residents](#), there are only two working pipes. Slums across India face similar shortage of infrastructure. While basic amenities for access to clean water remain elusive, many of these slum dwellers cannot afford to pay for private tankers and depend on the irregular water supply by the municipality. Slum dwellers who do pay, end up paying [more for water supply](#) as compared to other citizens. Water poverty has become one of the facets of the bottom of the pyramid (BOP) segment in India.

### SIMPLIFYING WATER ACCESS

Only 47% of Indian households have a source of water within the premises, about [36% of households](#) still have to fetch water from a source located at a distance at least a 100 meters from their houses. While some slums and low income communities have access to piped water, the supply is irregular and in some cases only once or twice a week.

Given the irregularity of water supply, slum dwellers, mostly women and children, often spend hours waiting to fill water. "NextDrop was set up to ease the burden of the water collection process and cut down the opportunity cost associated with water collection," says Nishesh Mehta, Co-founder, NextDrop. The social enterprise has a Smart Grid Lite solution that leverages mobile technology to collect and share water delivery information with residents and water utilities. "From the citizen's perspective, NextDrop provides convenience of water alerts by SMS or phone call 30-60 minutes prior to commencement of supply, so they can plan their day accordingly. On the Utilities side, it helps in providing information about the infrastructure across areas," says Mehta. Utilities in India represent the government/municipal departments. Currently the enterprise works with the water department at Hubli-Dharwad in Karnataka.

Currently, NextDrop's Smart Water Supply Message Service has over 25,000 household subscribers in Hubli-Dharwad that pay a monthly fee of INR 10 (US\$ 0.16) to receive water alerts in advance. NextDrop has also expanded operations to Bangalore where the monthly subscription is INR 25 (US\$ 0.41). Says Mehta, "The urban poor and low income communities benefit the most by this service," given that their [opportunity cost](#) of urban water collection is higher. Along with providing quality content to customers, the firm is looking to further expand the use of data collected for better efficiency and transparency on the utilities side.

**FEATURE** continued

Given the lack of data and no way of tracking, the utilities have no information on the infrastructure in areas, which in principle they are supposed to have. NextDrop is looking to tackle this problem by tracking and collecting the necessary information. In many communities, although water is supplied, it is insufficient as the water pressure is very low and therefore does not flow easily. “We are looking to collect real time data on infrastructure issues like water pressure by installing a citizen feedback system, where a standardized message like ‘*water pressure low*’ can be sent to the concerned engineer,” suggests Mehta. “Additionally, for the utilities, tracking other data

While some slums and low income communities have access to piped water, the supply is irregular and in some cases only once or twice a week.

like water levels in tanks is necessary to understand the availability of water.” On the systemic front, this kind of information will not only reduce the cost but also help in reducing energy consumption.

While there has been a positive response from the authorities, as the firm expands “utilities buy in” is a challenge. “However, once the system is in place, the buy in is pretty quick” suggests Mehta. “Mapping valves to customers, for water delivery information poses another challenge, given the diversity of customers and locations.” Going forward, NextDrop intends to leverage the concepts of big data and establish itself as platform for citizens to connect with the government.

**WORKING FOR THE BOP WITH THE BOP**

According to the department of drinking water supply estimates, **91% of urban households** have access to drinking water. However, this could be misleading as coverage refers to installed capacity and not actual supply. Additionally, in low income communities and densely populated slums, the water supply, even if from a treated source, is not necessarily safe. **Waterwalla**, a social enterprise was built with belief that the urban poor have an active role in solving their own challenges. The enterprise is looking to innovate alongside slum communities to develop inclusive business models for addressing the challenges with water.

Waterwalla’s model involves setting up small businesses that bring point of use (POU) technologies to urban slums. POU technologies essentially purify water immediately before use and are inexpensive. In an **interview**, Neil Parikh, co-founder of Waterwalla suggested that “The initial research we did into the condition of slum water sanitation in Dharavi was shocking. 33% of families had significant E. coli contamination. We wanted to design a solution through which these residents not only got the best technology, but also became empowered to advocate to their communities about the benefits of clean water.” Waterwalla employs a three step strategy, where they first partner with technology companies like **Bajaj Electricals**, **Eureka Forbes** and **TATA Swach**, recruit local entrepreneurs to sell and distribute these technologies and eventually form a franchise network for the distribution of water purification solutions. The most popular product sold by WaterWalla is Aquatab, which is a disinfectant tablet that costs as little as INR 1 (US\$ 0.016) per day.

Selected local entrepreneurs run their own WaterWalla shops where the firm provides them with renovated storefront, marketing assistance and access to technology. WaterWalla also trains local women’s groups in the need for clean water and door to door marketing.

FEATURE continued

The franchisee model of business, where the ownership lies in the hands of the community via local entrepreneurs seems to be one of the ways in which businesses can scale and truly be inclusive. Sarvajal is another social enterprise that is leveraging technology and data to ensure safe access to water while leveraging a network of local entrepreneurs. Founded in 2008 by the Piramal Foundation, Sarvajal has created impact by facilitating clean drinking water access to over 75000 customers across six states.

One of Sarvajal’s innovative solution that is particularly suitable for urban slums is the ‘Water ATM’ that uses off grid solar energy to dispense clean water at a low cost,

The franchisee model of business, where the ownership lies in the hands of the community via local entrepreneurs seems to be one of the ways in which businesses can scale and truly be inclusive.

24 hours a day. Customers buy water from the water ATMs by paying through pre-paid cards that can easily be recharged. Customers pay a nominal fee, which is kept lower than alternatives. The ATM’s water is purified centrally using reverse osmosis. These ATMs are owned by local franchisee entrepreneurs and the pay per use model helps the entrepreneurs maintain the equipment. Additionally, Sarvajal does real time monitoring to track and quickly react to problems. The devices have about 25 sensors that monitor the water pressure and filtration, making problem detection easy. Currently, the enterprise has set up 35 water ATMs in urban areas and plans to set up 50 across slum redevelopment communities in Delhi.

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CONCLUSION

Experts suggest that “inability to provide clean and safe drinking water – especially to the urban poor – has reached a crisis point.” Given that India’s slum population is expected to grow to 104 million, by 2017, demand for water is going too far out-strip supply. Private sector solutions to mitigating challenges such as access, safety and affordability are emerging in India. By mobilizing the poor, using appropriate user friendly technologies and collecting essential data, these organizations are not only improving access to water but also are generating employment opportunities in the slum areas. Growing awareness for safe water combined with the health and economic costs associated to the lack of it, the willingness to pay for improved water supply has increased amongst the poor opening a huge market for innovations that are inexpensive and replicable. These low cost innovations are scalable solutions to the impending urban water crisis and a step forward in addressing the large scale water poverty faced by the urban poor.



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**DEVELOPMENT INITIATIVE**

# Trading along with the Tradesmen

**BY NOOPUR DESAI**

*The spirit of survival never dies in cities across India. Every day at 6.00 am, sipping on tiny cups of tea, dressed in faded shirts and trousers, a motley group of men (stand in groups at junctions/corners of a street) with a keen eye on the pedestrians that pass by.*

## DEVELOPMENT INITIATIVE continued

*These are tradesmen/handyman that live in low income areas and are looking for short term jobs. Chaos follows when some labor contractors come by and start announcing their requirements for the day. Some tradesmen get selected for the jobs while others remain unemployed. Everyone disperses by 9.00 am.*

The above is a situation witnessed across cities in India every day. Skilled, semi-skilled and unskilled laborers meet at corners of streets or road junctions seeking work from contractors who in turn are looking for masons, carpenters, painters, plumbers, and so on. In Maharashtra, these workers are called '*Naka workers*' (*Naka* means junction in Marathi). These *naka* workers or tradesmen belong to the unorganized

For the informal sector workers, including casual laborers, moving up the value chain for better jobs is extremely difficult given the lack of skills and formal certification.

sector and often engage with the construction industry. Some of these workers have waited at the *nakas* for the last 12-15 years. A study suggests that some *naka* workers have been able to secure work for only 10-12 days in a month, resulting in high income insecurity.

The *naka* workers have an informal understanding among themselves whereby they charge similar rates for work. However, in a buyers' market, they are subjected to very low wages between INR 100 (US\$ 1.60) – INR 300 (US\$ 4.79) per day. They need to cultivate good relationship with contractors to ensure regular flow of work. Given the income insecurity, low level of skills and irregularity in work, tradesmen are unable to climb out of poverty.

### SKILLING THE UNSKILLED

For the informal sector workers, including casual laborers, moving up the value chain for better jobs is extremely difficult given the lack of skills and formal certification. To improve the condition of tradesmen and other labor, there is a need to organize the workers under one umbrella and provide them with access to essential services. Identifying this need, LabourNet was initiated as a platform for informal workers. "There is a need for vocational education for the workers. The poor will always find options for jobs. However, the lack of skill sets will lead them into irregular jobs. LabourNet is looking to enhance these skillsets, and provide regularity in employment," suggests Gayathri Vasudevan, founder, LabourNet.

"Classroom teaching will not work with laborers," says Vasudevan. Hence, LabourNet has formulated different ways of providing skill training and education to them. One method involves conducting onsite training sessions or taking the classrooms to where the workers are. Additionally, the enterprise has established centres of training in 11 states, also including tier II and tier III cities across India. "We also provide vocational education in government schools, for students from the 9<sup>th</sup> standard. One of the reasons to reach out to schools, is to make the students realize that these are potential dignified occupations for their future," says Vasudevan. LabourNet also works to provide social security to these tradesmen. "Working around the banking KYC (Know your customer, for customer identification process) norms is extremely challenging, since most workers are migrants and belong to low income groups with insufficient documentation," says Vasudevan. The certification and identity provided by LabourNet is helpful in gaining access into organizations providing formal work.

**DEVELOPMENT INITIATIVE**  
continued**BRINGING DIGNITY TO LABOR**

There is a growing demand for handymen/tradesmen in the real estate and facilities management industry. A Frost and Sullivan report suggests that there are roughly **5000 urban homes** in India who look for facilities management services every day. The same study estimates a market size of INR 2.5 million (US\$ 39454.00) per day per city.

Demand for tradesmen is high among the middle and upper class households. However, these households find it difficult to access tradesmen such as plumbers or electricians for small and specific tasks because they do not have a fixed address. Other challenges they face include – how to assess the quality of work or the skills of the tradesmen and how to negotiate a fair price. The resulting service experience is not happy, as they haggle over prices and often see shoddy or incomplete work in the absences of informed supervision.

Demand for tradesmen is high among middle and upper class households. However, these households find it difficult to access tradesmen. ‘Accessibility, Reliability, Safety and Transparency’ are the four pain points in finding tradesmen in India.

Sharath Vasta was one such customer who struggled when he was setting up his house in Bangalore, India in 2009. “Accessibility, Reliability, Safety and Transparency” are the four pain points in finding workers, suggests Vasta. His experience with tradesmen led him to start a social venture, **Jack on Block**. Jack on Block is a facility management and services firm operational in Bangalore that provides services ranging from carpentry, electrical, plumbing, painting, pest Control, water tank cleaning, housekeeping, carpet shampooing, sofa shampooing, masonry, A/c service, house cleaning and computer hardware & networking.

The idea behind Jack on Block is not only to tackle the issues faced by urban households, but also to organize the informal tradesmen and offering them respect and credibility. “Experts advised me to outsource the business and work with tradesmen on a contract basis. However, that defeats the purpose of an inclusive business. Every tradesmen working with us is a fulltime employee of Jack on Block,” suggests Vasta. “I wanted to provide a steady salary and employment to handymen and root out incentives for crime.”

Jack on Block thus increases incomes for its employee-tradesmen, who otherwise earned irregular daily wages. Employees with the social enterprise now earn a regular INR 12000 (US\$ 189.38) – INR 15000 (US\$ 236.72) with additional social security benefits like insurance. According to Vasta, the enterprise pays higher than market wages to ensure retention as well as improve the standard of living for the employees. In Karnataka, India, where the prescribed minimum monthly wage is **INR 6,500** (US\$ 102.58) for trained technical staff, Jack on Block offers **INR 8,000** (US\$ 126.25) to a trainee. Additionally, every employee of the firm is given identity and social security benefits like ESI and Provident Funds along with a stipulated number of holidays. To motivate and build deeper bonds with the employees, the firm also celebrates birthdays and conducts employee of the month awards. Says Vasta, “We have also engaged in teaching the workers softer interpersonal skills and English communication. The workers are well groomed, wear uniforms and have proper identity cards.”

**DEVELOPMENT INITIATIVE**  
continued

“Recruiting and organizing the tradesmen is not as much of a challenge as funding and awareness is,” suggests Vasta. “Funding remains to be a major challenge given that it is a labor intensive company.” Apart from hiring and training tradesmen, Jack on Block also incurs a cost on account of marketing to the consumer base. However, recent funding by Unitus Seed Fund and Mumbai Angels of INR 15 million (US\$ 236724.00) has given some stability to the firm. Jack on Block is looking to expand operations within Bangalore as well as scale to cities like Chennai, Hyderabad, Pune and Cochin.

Currently, the enterprise has a database of about 4000 customers with 500 recurring customers/members who have enrolled for packages. Jack on Block issues membership schemes that are discounted annual packages for particular unlimited services like pest control or toilet cleaning. Members currently include households and corporate clients. Technical services like carpentry, plumbing and electrical services account for 40% of the revenues, and painting services account for the remainder. Jack on Block already has a user friendly website and mobile application for customer convenience. The company is also looking to build on GPS enabled handed devices that will help in tracking the workers, provide for a customer data base and reduce the wait time for workers between jobs.

**CONCLUSION**

There is a huge demand supply gap in the facilities management industry. Organizations like Jack on Block are working towards addressing this gap and mobilizing those at the bottom of the pyramid. Additionally, there is an urgent need to provide skills and identity to informal workers in India. Organizations like LabourNet seek to fill the skills gap. “Work Integrated Education for labor is the way forward” to promote growth up the value chain ladder, suggests Vasudevan.

Both LabourNet and Jack on Block are in talks with the National Skills Development Corporation to further the need of on the job vocational training for the works. These efforts not only help in promoting livelihoods and income generation activities of the poor but are also a step forward in building a professional workforce for the urban economy.

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SAMAGRA SANITATION

CASE STUDY

# Generating demand: Engagement model in Sanitation

BY USHA GANESH

In India, about 70% of people [defecate in the open](#). According to the Demographic and Health Surveys, open defecation and the resulting health impacts lead [to stunted growth in children](#). The Indian Government plans and builds public toilets each year, but do not improve the situation because systems to maintain the toilet blocks are weak. As a result, the [toilet blocks](#) are in a dilapidated condition, and unfit for use.

In response to the paucity of clean, usable public toilets and the recurring health scares that emerge seasonally, several social entrepreneurs are providing solutions that range from partnerships with the Government to provide e-toilets that self-clean and are stand-alone units. One challenge they continue to face is that they require a revenue model that promotes sustainability – simply put; they need to find a way to make users willing to pay for clean toilets.

[Samagra](#) is social enterprise that has dabbled with toilet solutions and has moved on to providing engagement models to generate demand for toilets. Says founder Swapnil Chaturvedi, “We realized that the infrastructure is (mostly) there, we need to build the business case for its use, maintenance and care.” Samagra currently works in two slum settlements in Pune-Kothrud and Warje. In both these slums, public toilets were available but were unfit to use. They were poorly maintained, had ventilation issues, had no lights since vandals made away with the bulbs and had no dustbins. Says Chaturvedi, “Where the physical space is not engaging, there is no willingness to pay.” Operators on a fixed low salary stay on the job as they get a free place to live.

**CASE STUDY** continued

They see that the services of the toilet are free, and therefore are not motivated to keep it clean. Also, they feel the need to bolster their low salaries by working elsewhere to support their families.

Pay per use toilets are working efficiently in several high traffic public areas in India – such as near railway stations and on busy highways. A challenge with enforcing payment for community toilets in slums is that it is a community of people who do not have any ownership towards utilities provided to them. Slums also typically have people who will bully the operator and even physically enforce free use – sustainability therefore often comes at high cost or not at all.

**SAMAGRA'S ENGAGEMENT MODEL**

Samagra's engagement model of motivating (not forcing) people to pay actively involves and incentivizes all the stakeholders – the end users, the government, local store owners, toilet operators and SHGs/NGOs serving the community. For the municipal corporations, it provides a data visualization platform, where it can monitor toilet usage and its maintenance. Operators in this model can retain all their col-

In response to the paucity of clean, usable public toilets and the recurring health scares that emerge seasonally, several social entrepreneurs are providing solutions that range from partnerships with the Government to standalone, self-cleaning e-toilets.

lections as their income, so they are incentivized to engage more and more users. The end user is incentivized through reward points for early payment of toilet usage fees which can be redeemed at different vendor outlets. For the reward point partners, who are typically neighborhood stores, there are clear advantages in tying in steady clientele, and therefore, future revenues. Samagra's services include upgrading and retrofitting existing toilet blocks, creating a pseudo franchise model for operations and maintenance, educating end users on health, hygiene and sanitation and rewarding them for adopting healthy and hygienic behavior.

Samagra's rewards program forms the fulcrum for the other services. When households pay on time for their monthly usage (between the 1<sup>st</sup> and 5<sup>th</sup> of each month) they earn rewards points that they can redeem against purchases they make with local vendors.

The rewards points motivate people to pay on time, and highlight what they will gain and what they stand to lose by delaying payment. Says Chaturvedi, "Often, they are more motivated when we highlight what they stand to lose and not so much when we say they stand to gain." The psychological messaging is tailored to demonstrate this – for instance, one message in Hindi translates into "150 users have already paid, when will you pay?" Adds Chaturvedi, "this immediately segments slum dwellers into those that have paid and those that haven't – making it aspirational for the latter group to pay up quickly and earn rewards." Another message to encourage customers to pay early and win rewards says "Pay INR 50 (US\$ 0.80) and get INR 60 (US\$ 0.96)" and explains how the user household needs to pay INR 50 (US\$ 0.80) for the family per month and get offers that cumulatively gives them INR 60 (US\$ 0.96) in price offs on regular products they purchase each month such as soaps, shampoos or detergent.

CASE STUDY continued



**IMPACT**

Chaturvedi sees their biggest impact in demand generation through efforts to bring users on board. He adds, “The PMC (Pune Municipal Corporation) is one of the few municipalities in India with a very strong infrastructure. Yet they have 108 open defecation sites in Pune alone, and this is where we step in.” In Warje, for instance, most of the community practiced open defecation even though there is a 36 seater community toilet (18 male and 18 female seats). Since May 2013, they have seen over 60 households move over to paying for and using toilets for the first time.

Samagra also plans to align itself closely with the NGOs that are already serving the slum communities to ensure the rewards and redemption also help deliver impact in mission aligned areas. For instance, the Samagra team found that rewards were most often redeemed to buy Maggi Noodles (an instant noodles brand from Nestle that is a household name in India today) and the most sold products were from *Kurkure* (a savory snack brand by PepsiCo). Samagra is engaging with an NGO to offer *laddoos* (an Indian sweet) that are fortified with micronutrients and have been proven in a scientific study to improve height and weight in children as rewards. Samagra is putting together a franchisee model where women from the slums are trained in making these *laddoos*, ensures they get the raw material for the same as well as contribute to branding the *laddoos*. Chaturvedi adds that such activities slow them down, but have been very instrumental in aligning the social enterprise with its integrated mission of health, hygiene and productivity. (Samagra is a Sanskrit word meaning “integrated.”)

**SAMAGRA’S SUSTAINABILITY MODEL**

Samagra’s revenue model thus does not come from toilet usage fees, but from commissions it can potentially earn through the redeemed reward points. The next challenge therefore is to ensure that families redeem the rewards coupons they win. Samagra has gone through over five iterations of offerings – what products to offer under redemption, what frequency, when to offer and so on. Samagra is currently achieving 40% rate of redemption but with products that Chaturvedi says “are more aligned with users’ needs and wants,” Samagra hopes to accomplish redemption rates of over 80% in coming months.

Chaturvedi adds that in slum communities, people understand that their payment goes directly to fund the livelihood of the operator, who belongs to their community. Most households pay for the operator, while very few pay for the rewards. The real

**CASE STUDY** continued

challenge is that most households do not budget towards payments for toilet usage. However, once habituated to using the toilets, people seldom happily return to open defecation, especially women. The Samagra team has, therefore, seen families which have paid for toilet usage even in lean months when the household has had no income at all. Many families who are not been able to take advantage of rewards because of their income patterns (they get paid after the 10th of every month), are encouraged to figure out a way. And this month, for the very first time, 3 families have already paid for October fee in advance so that they can get rewards next month.

Chaturvedi says, “This kind of progress, although slow, makes the LooRewards model very powerful in creating sustainable change. Behavior change can happen only through small/incremental progress. And once behavior gets changed this way, there is no going back.” Compare this to other programs which try to change behavior right away. Chaturvedi points out that “such impulsive campaigns are not only ineffective, but also have unintended consequences.”

**WAY FORWARD**

Chaturvedi and his team are brimming over with ideas which will get tested and implemented in the coming months in all service locations.

Samagra’s brand of social and psychological messaging is universal and can be applied to a range of critical needs sectors that face the same dilemma of generating demand in an area of high need.

Having proven their model in the two slums at Kotrud and Warje, Samagra would like to scale further within Pune. With 564 slums and 500 toilet blocks in the city, the team has its work cut out for them. The PMC too has seen that the model and concept has been proven and is keen for Samagra to roll out to more toilet blocks quickly. Chaturvedi aims to reach 5000 families by March 2014, up from the current 900 families (this number is an average and varies each month as households move slums or drop off for other reasons). He also plans to grow his team from the current 7 people to around 15 to help Samagra scale quickly.

**CONCLUSION**

Samagra’s brand of social and psychological messaging is universal and can be applied to a range of critical needs sectors that face the same dilemma of generating demand in an area of high need. There are several layers that can be added to the basic engagement model of rewarding good habits such as reinforcing health and hygiene messages and promoting safe products – for example, shared use of a water filter, sanitary napkins, vaccinations and hand washing. In conclusion, Chaturvedi says, “Yes, they are very poor. But they are also owners of motorbikes and mobile phones – they just don’t make proper choices. Demand generation in this context is about helping them make positive choices for themselves and their families.”

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NEWS DEEP DIVE

# Quacks, Drug resistance, and the Urban Poor

BY SHREE RAVINDRANATH

The urban poor face significant challenges to staying healthy. Their informal status, inadequate living conditions, and socio-economic profile mean that they fall ill frequently, and are likely to need medical care often. Given the lack of preventive treatment-seeking behaviour and the other constraints of the urban poor, it is highly likely that they approach physicians looking for cheap and fast-acting cures to their health conditions.

A recent [Physician and Chemist census](#) that covers 120 cities in India has found that a large proportion (22%) of the doctors practicing in urban India may not hold an [MBBS](#) (Bachelor of Medicine, Bachelor of Surgery) degree, the basic minimum qualification needed to practice allopathic medicine in India and across the world. These doctors may instead have degrees in alternative medicine such as Ayurveda or Homeopathy, but may still be practicing modern (allopathic) medicine in spite of not being authorized or trained to do so.

The census divides quacks amongst three categories — quacks with no qualifications at all; practitioners of Indian Medicine (Ayurveda, Siddha, Tibb, Unani), Homeopathy, Yoga and Naturopathy, commonly grouped under [AYUSH](#), who are not qualified to practice modern medicine (allopathy) but are doing so; and lastly, practitioners of so-called integrated medicine such as electro-homeopathy, indo-allopathy etc, terms which are not recognized under Indian law. The second and third category of quacks may have some basic training in healing and medicine.

The quacks with no qualifications at all are often the ones with makeshift shops that are little more than a tent or a piece of cloth spread on the ground, set up in close

**NEWS DEEP DIVE** continued

proximity to areas frequented by the urban poor, such as on pavements, at the corners of busy roads, market places, near public toilets, etc. While they claim to be traditional healers, it is likely that they rely on a combination of superstition and placebos to “treat” the health problems of their patients. They also rely on frugal innovation to relieve their patients’ symptoms— such as using industrial glue to [stick replacement teeth](#) into the mouths of their patients.

The second and third category of quacks – the trained quacks – often have established locations of practice, and are widely recognized and regarded as doctors within the community. The poor, however, have no means to verify their qualifications, and in fact they may not even understand or consider the distinction between an AYUSH practitioner and an MBBS doctor to be noteworthy.

These so-called ‘trained’ quacks seem to be charging the lowest consultation rates amongst physicians with fixed location practices, thus making the urban poor more likely to reach them for their healthcare needs. In their effort to try and deliver rapid and cost effective treatment as demanded by their patients, these trained quacks prescribe allopathic treatment with scant regard to the procedures that need to be followed, or to the possible side-effects of such treatment.

Since the enforcement of regulations on qualified quacks is not stringent, the quacks themselves stand to lose very little if their treatments go wrong.

Quackery of all kinds makes the patients pay a heavy price. Not only do the diseases go undiagnosed and untreated, the risk of spreading communicable diseases due to this negligence increases. Alarming as they may seem, the damage caused by unqualified quacks may actually be localized and easier to manage as compared to the complications of the others. The repercussions of prescribing drugs without complete knowledge of their use can result in pathogens developing drug resistance, with wide ranging effects.

#### **DRUG RESISTANCE AND SLUM DWELLERS**

The [World Health Organization](#) (WHO) states that [Microbial drug resistance or Antimicrobial Resistance](#) causes conventional treatment to be ineffective, resulting in prolonged illnesses, higher costs, and a greater risk of death. Hospital-acquired infections are in fact the toughest to treat, being caused by multi-drug resistant organisms. In addition, new resistance mechanisms are developing, thus making existing antibiotics virtually ineffective. Inappropriate use of antimicrobial remedies and insufficient diagnostic, prevention and therapeutic tools can all contribute to the effect.

Quacks frequently prescribe treatments that may be innocuous enough – symptomatic treatment for coughs, colds and antibiotics for infections. Even while prescriptions by quacks means a lower upfront cost for the urban poor, it may mean higher hidden costs. The poor may derive temporary, symptomatic relief without being able to treat the root causes of the disease, or even worse, symptomatic treatment may mask the signs of a more serious problem till it is too late. Inadequate information about medicines, especially antibiotics, may result in inappropriate dosage or use. This in turn may speed up the evolution of drug resistance in pathogens.

For the slum dwellers themselves, being affected by drug-resistant microbes would result in a sharp increase in health care costs, as therapies become more expensive, and often require prolonged treatment in hospitals. Given their financial constraints, the urban poor are not likely to be able to afford these treatments, thus resulting in a greater risk of death.

**NEWS DEEP DIVE** continued

**CONTROLLING THE PHENOMENON**

Since the enforcement of regulations on qualified quacks is not stringent, the quacks themselves stand to lose very little if their treatments go wrong. In addition, the process of evolution of drug resistance amongst pathogens is a slow one, and it may be difficult to pinpoint the source of this development. Given that the quacks adopt an unscientific approach to allopathic treatment, the chances of them misusing medicines and failing to adopt new and better techniques of treatment are low. All this contributes to the quacks continuing their practice with impunity, unheeding of the larger risks that they are creating for the community.

Stricter regulation on the practice and prescription of modern medicine is desirable in order to control this problem. However, the magnitude seems daunting – the census estimates that, of the 1,000,000 practitioners, about 40% (400,000) are quacks. In addition, given the lack of healthcare infrastructure and other regulatory and enforcement challenges, it seems that prescription of allopathic drugs by quacks and traditional practitioners is here to stay, at least for the near term.

A recent Physician and Chemist census that covers 120 cities in India has found that a large proportion (22%) of the doctors practicing in urban India may not hold an MBBS degree, the basic minimum qualification needed to practice allopathic medicine in India and across the world.

Building healthcare infrastructure would include not only increasing the supply of qualified doctors, but also facilitating easy and affordable access to primary, secondary and tertiary healthcare. However, addressing this would be a long drawn out process, and there are immediate steps that can be taken to begin addressing the problem in the meanwhile. Effective interventions need to target the patients or the community, the practitioners of traditional medicine or the quacks, and even the pharmacies, which sell the drugs.

For the community, education programs that sensitize them to quackery would be a good starting point. In addition, creating a system to help them choose the right doctor, along with the ability to verify the professional's credentials would help make progress.

For the trained quacks, sensitizing them to the pitfalls of prescribing medicines that they may not entirely understand would be helpful, however, this may not be effective without stricter regulation on their prescriptions, perhaps even monitoring through the pharmacies. Stringent clamping down on quacks who have no qualifications whatsoever would also be a step in the right direction.

Finally, for the pharmacists, tighter regulation and control may be desirable but difficult to implement. The Physician and Pharmacist's census shows that, for pharmacies situated inside of hospitals, the number of customers walking in without a prescription from an MBBS doctor is 0%. This may be a model that can be adopted for other pharmacies as well, necessitating their alignment with a qualified MBBS doctor in order to better regulate the sale of allopathic drugs.

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**NEWS DEEP DIVE** continued

**CONCLUSION**

This is a case that plays out the adage, ‘A little knowledge is dangerous’. A disproportionate part of the costs due to drug resistant microbes will be shouldered by the economically weaker sections, and slum dwellers are a high-risk group because of the density of the slums.

However, the effects of this phenomenon are also likely to spread to those better off by dint of the slum dwellers being an integral part of a city, and providing goods and services to all other socio-economic classes. It is time that the privileged also take the threat of drug resistance seriously and use their influence to galvanize action, even if it is for the selfish reason of their own well-being and that of their children’s

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# Regional News Summaries

## Development & the Economy

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Economy suffers due to constant strikes in Bangladesh. India faces high rates of Inflation.

### **BANGLADESH GETS A RECORD OF US\$ 2.78 BILLION FOREIGN AID**

August 1, 2013

[Bangladesh] Bangladesh surpassed its record of foreign aid receipts in the fiscal year 2012-2013 with different donor countries and agencies disbursing over US\$ 2.78 billion. The net foreign aid stands at over US\$ 1.88 billion, 34% higher than the previous fiscal year. According to the Economic Relations Division, US\$ 20 million was provided as food assistance and the rest was for development aid.

<http://bdnews24.com/economy/2013/08/01/bangladesh-gets-a-record-2.78-blm-foreign-aid>

### **STRIKES SUFFOCATE BANGLADESH'S ECONOMY**

August 4, 2013

[Bangladesh] Bangladesh faces immediate economic threats from the growing frequency massive strikes also known as *hartals*. According to the commerce ministry, the country has witnessed 36 nationwide shutdowns. It is estimated that the economic cost of these strikes in Bangladesh accounts for over US\$ 7 billion or more than US\$ 200 million a day, this year. Sometimes, these strikes have also turned violent and claimed 80 lives since January.

<http://www.thedailystar.net/beta2/news/strikes-suffocate-bangladeshs-economy/>

### **INFLATION SURGES TO 5-MONTH HIGH OF 5.78%**

August 14, 2013

[India] Food articles' inflation rose to double digits at 11.91% in July 2013. The Onions prices flared at 145% and vegetable prices were up by 46.69%. This inflation is much higher than the Reserve Bank of India's comfort zone at 4-5% of the wholesale price index. The rupee has lost 10.3% against the dollar in 2013. The sharp fall in rupee has increased the oil import bill and pushed up fuel and power inflation to 11.31% in July.

<http://www.thehindubusinessline.com/economy/doubledigit-rise-in-food-prices-lifts-inflation-to-579-in-july/article5021723.ece>

### **ABOUT 80% OF DEVELOPMENT PROJECT APPROVED**

August 25, 2013

[Nepal] The National Planning Commission of Nepal has approved almost 80% of development project proposal in this fiscal year. The government will implement 452 projects in 2013-2014. However, the Ministry of Physical Planning, Works and Transport Management, Ministry of Urban Development, Ministry of Irrigation and Ministry of Education are yet to send their proposals.

<http://thehimalayantimes.com/fullNews.php?headline=About+80pc+projects+approved&NewsID=388657>

**NEWS SUMMARIES** continued

## Education & Health

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Pakistan faces challenges of maternal health and low birth weight. Bangladesh launched a new program to ensure 100% enrollment in primary education across the country.

### **PAKISTAN JOINS PLANS FOR POLIO – FREE WORLD BY 2018**

August 8, 2013

[Pakistan] Polio Eradication and Endgame Strategic Plan 2013-18 is a new comprehensive and long strategy change, which has been developed to ensure a polio-free world by 2018. For Pakistan, coordination between security and local authorities to generate area wise assessment has been institutionalized in the plan. The implementing partners World Health Organization and UNICEF have intensified their support despite escalation in security threats.

<http://www.asianewsnet.net/Pakistan-joins-plan-for-a-polio-free-world-by-2018-50071.html>

### **TAKING EDUCATION TO UNDERPRIVILEGED CHILDREN**

August 19, 2013

[Bangladesh] The government has launched the Reaching out-of-school project to create equal opportunities in primary education for children across 52 districts. It plans to reduce the number of children out of school to zero in five years. Currently 77,488 children with special needs of various types are enrolled with primary schools. The quality of teaching is also poor, with approximately 24% primary school teachers being untrained.

<http://www.thefinancialexpress-bd.com/index.php?ref=MjBfMDhfMTIfMTNfMV85MI8xODAyMzQ=>

### **THE VICIOUS CIRCLE OF LOW BIRTH WEIGHT IN PAKISTAN**

August 29, 2013

[Pakistan] Babies born under 2.5Kg is not unusual for Pakistan. The country has recorded a 32% rate, which is the world's second highest. Along with poverty, the low birth weight can be attributed to factors including body mass index of mothers, place of birth of the child and the nutritional status of the mother. Studies suggest low weight babies will on average have a 5 percent lower IQ.

<http://www.irinnews.org/report/98662/the-vicious-circle-of-low-birth-weight-in-pakistan>

**NEWS SUMMARIES** continued

**Energy & Environment**

Pakistan will focus on sustainable energy management in its new National Sustainable Development Strategy.

**PAKISTAN KICKS OFF STRATEGY FOR SUSTAINABLE DEVELOPMENT**

August 5, 2013

[Pakistan] According to the National Sustainable Development Strategy report, the cost of future climate impacts is US\$ 14 billion each year for the next 40 years. The Pakistan government has initiated a new 'green agenda' under its National Sustainable Development Strategy. This agenda includes a knowledge management system based on science, technology and innovation. The climate change goals include disaster risk reduction and management, vulnerability mapping, community based adaption, sustainable land management combined with building climate resilient infrastructure for the country.

<http://southasia.oneworld.net/news/pakistan-kicks-off-strategy-for-sustainable-development#.UjYupdKno0J>

**POWER EXPORT TO BANGLADESH FROM OCTOBER**

August 23, 2013

[India] Come October, India is going to become an exporter of power to Bangladesh courtesy the National Thermal Power Corporation (NTPC) and West Bengal State Electricity Distribution company. West Bengal has recently turned power surplus and the state would sell 250 MW of power to Bangladesh through the Power Trade Corporation. The NTPC has committed an additional supply of 250 MW. The total supply is likely to be of 4000 million units, fetching about US\$ 350 million for India.

[http://www.business-standard.com/article/economy-policy/india-to-export-power-to-bangladesh-113082200278\\_1.html](http://www.business-standard.com/article/economy-policy/india-to-export-power-to-bangladesh-113082200278_1.html)

**People & Poverty**

Urban Poverty levels decline in Maharashtra. Pakistan's urban poor face risks because of the growing e-waste market.

**DANGEROUS LABOR: THE LITTLE KNOWN 'E-WASTE' PHENOMENON**

August 1, 2013

[Pakistan] e-Waste has become a huge and growing problem globally. Around 40 million metric tons of e-waste is produced annually of which 13% of the weight is recycled in developing countries like Pakistan, India, Bangladesh and Sri Lanka. Pakistan has become a dumping ground for such material. Karachi is one of the major markets for e-waste where electrical goods and smuggled goods arrive by sea and land for sale or further distribution to other cities. The urban poor are informally involved with this recycling and distribution. The informal e-waste activities are posing a serious threat to environment and human health in Pakistan. Children scavengers who pick up material from these e-waste sites are at risk for different diseases including neurological damage.

<http://www.dawn.com/news/1032967/dangerous-labour-the-little-known-e-waste-phenomenon>

**NEWS SUMMARIES** continued

**JOBS BECKON URBAN YOUTH IN HEALTHCARE**

August 11, 2013

[India] The urban poor have adapted to nursing as a new profession to sustain themselves. In Bhubaneswar, Odisha, the youth trained under the centrally-sponsored Swarna Jayanti Sahar Rojgar Yojana (SJSRY) for 'bedside assistants', are earning between INR 1,500 (US\$ 23.94) and INR 3,000 (US\$ 47.88) a month. The state government has targeted to train at least 7,600 urban youths in different sectors for 2012-13 under SJSRY. Apart from nursing training, the institutes are providing skills training in computer learning, security, driving, masonry, food processing, tailoring, mobile handset repairing and candle making, amongst other vocations.

[http://articles.timesofindia.indiatimes.com/2013-08-11/bhubaneswar/41294083\\_1\\_nursing-training-27-training-institutes-youths](http://articles.timesofindia.indiatimes.com/2013-08-11/bhubaneswar/41294083_1_nursing-training-27-training-institutes-youths)

**BY 2017, INDIA'S SLUM POPULATION WILL RISE TO 104 MILLION**

August 20, 2013

[India] By 2017, India's slum population is likely to surge to 104 million or around 9% of the total projected national population of 1.28 billion. Maharashtra, Uttar Pradesh, Andhra Pradesh and Madhya Pradesh will host largest chunks of India's slum population. There are indicators for rapid urbanization with a projected share of urban households rising from 28% to 50% in the next two decades.

[http://articles.timesofindia.indiatimes.com/2013-08-20/india/41428399\\_1\\_dweller-slum-population-rajiv-awas-yojna](http://articles.timesofindia.indiatimes.com/2013-08-20/india/41428399_1_dweller-slum-population-rajiv-awas-yojna)

**CDA'S COLD SHOULDER PUTS SLUM DWELLERS IN TROUBLED WATERS**

August 20, 2013

[Pakistan] The overflowing water in drains/*nullahs* has wreaked havoc in Islamabad, Pakistan. Roads have turned into standing ponds after the recent monsoon rains. Dirty water has also accumulated inside the residents' homes. The Capital Development Authority however has not addressed any concerns of the slum dwellers. While billions have been spend for new road infrastructure, the poor drainage system has created large potholes on the roads leading to major inconvenience.

<http://www.pakistantoday.com.pk/2013/08/20/city/islamabad/cdas-cold-shoulder-puts-slum-dwellers-in-troubled-waters/>

**URBAN POVERTY: MAHARASHTRA'S VANISHING ACT?**

August 21, 2013

[India] Urban poverty levels in Maharashtra dropped by a massive 47% in 2011-2012 according to the latest poverty estimates by the Planning Commission of India. The all India urban poverty level is said to have dropped by 31%. The economy of Maharashtra is one of the fastest growing which has fuelled the growth of industries and service sector based mostly out of urban areas. However, the impact of this decline is not visible in the streets of Mumbai, where some workers still earn less than INR 300 (US\$ 4.79) per day.

<http://www.ndtv.com/article/india/urban-poverty-maharashtra-s-vanishing-act-408658>

# Events

## **WORLD TOILET SUMMIT**

October 2, 2013

Central Java, Indonesia

<http://www.worldtoiletsummit-indonesia.com/index.html>

## **INDIA WATER FORUM**

October 28, 2013

New Delhi, India

<http://www.teriin.org/events/iwf/>

## **CLIMATE CHANGE IMPACTS AND SOCIETAL ADAPTATION**

November 6-8, 2013

Ajmer, India

[http://www.curaj.ac.in/pdf/workshop/ensc/CURAJ\\_workshop.pdf](http://www.curaj.ac.in/pdf/workshop/ensc/CURAJ_workshop.pdf)

## **NATIONAL CONFERENCE ON HIGHER EDUCATION IN INDIA**

November 15-16, 2013

Madurai, India

<http://www.mkuniversity.org/ASC/conference>

## **INTERNATIONAL CONFERENCE ON GLOBALIZATION, GOVERNANCE AND SUSTAINABLE DEVELOPMENT**

December 8, 2013

New Delhi, India

<http://jpg.net.in/conference.htm>

## **3RD SOUTH ASIAN MANAGEMENT RESEARCH AND CASE CONFERENCE 2013 – CELEBRATING SOUTH ASIA: EXPLORATIONS OF THE CONTRIBUTIONS TO GLOBAL ECONOMY**

December 27-29, 2013

Bangalore, India

<http://www.iimb.ernet.in/samrc2013>

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Intellecap is a pioneer in providing innovative business solutions that help build and scale profitable and sustainable enterprises dedicated to social and environmental change.

We seek to build institutional capacity and channel investments in the development sector through Knowledge Services, Consulting, and Investment Banking Services. Intellecap hosts Sankalp Social Enterprise and Investment Forum, Asia's largest social enterprise forum that brings together over 700 investors, innovative social enterprises, policy makers, funders and other key stakeholders from across the world.

Intellecap also promotes I<sup>3</sup>N, India's first angel investment network that makes early stage investments in double bottom line for-profit enterprises.