Tune into Better Health

Building Communities of Change
“Every year we lose more than 200,000 children to diarrhea. We wanted to use our proven content and innovative delivery to improve indicators on diarrhea prevention and management in one of the most affected areas of India.”

Sashwati Banerjee
Managing Director,
Sesame Workshop India
Tune into Better Health

Building Communities of Change

An initiative of

Galli Sim™

Seasame Street™
Sesame Workshop India’s (SWI) flagship initiative Galli Galli Sim Sim (Indian adaptation of Sesame Street) made its debut on TV in 2006.

We have reached over 130 million children through a combination of media and outreach projects to help children grow smarter, stronger and kinder.
Our Building Communities of Change project, supported by the United Nation Foundations–Innovation Working Group Catalytic Grant, built on the successful Radiophone model to address a critical health issue. It combined the power of radio and mobile technology to empower children to become agents of change.
WHY?

Diarrhea kills 225,000 children every year in India. This is a tragedy, more so because it is usually entirely preventable¹.

More than a fifth of the world’s children below the age of 5 live in India, and despite many other advances in child development, diarrhea remains a leading cause of death and morbidity in the under-five age group and has a direct impact on children’s cognitive and socio-emotional skills.

¹ World Health Statistics 2011, www.who.int
Data shows that North and Central India report high incidences of diarrhea, hence we targeted this region as the project area. Further, Shivpuri (Madhya Pradesh) was chosen as a program implementation area because of penetration of both radio (including community radio) and mobile phones. We also ran an on-ground campaign to support the program here.
WHAT?

Building Communities of Change project used a combination of radio and mobile technology to deliver engaging content on diarrhea prevention and management.
The Innovation Working Group Catalytic Grant allowed us to continue and expand the Radiophone project to address diarrhea prevention and management.

The objectives of the project were to improve the knowledge and attitude of children between the ages of 3 to 8 years, and their caregivers towards:

1. symptoms of diarrhea,
2. diarrhea prevention,
3. diarrhea management, and
4. use of Oral Rehydration Salts (ORS)

In order to achieve these objectives, SWI developed 14 radio episodes that were made accessible on an IVRS* platform through a missed call.

* Interactive Voice Response System
The radio episodes focused on:

1. Washing hands with soap
2. Storing and using water safely
3. Using toilets
4. Wearing slippers to the toilet
5. Using Oral Rehydration Salts
Every episode started with the familiar *Galli Galli Sim Sim* (GGSS) song, and continued with our characters playing out amusing scenarios to impart essential messages. From naming a character Kaching Pendulkar (after the famous Indian cricketer Sachin Tendulkar), to having characters emit realistic and familiar stomach rumbles, the spots were simultaneously funny, topical and informative.

Aaila!
Mujhe ye dekh ke bahot khushi hui ki ki tum log paani ko saaf karke peete ho…
‘I feel that *Galli Galli Sim Sim* changed the way people use mobile phones. Many parents told me that because there is a cost attached to making calls, they generally kept phones away from their children. But since the GGSS program was free of cost and so engaging, parents allowed children to use their phones and children became familiar with the technology.

Richa Shukla
Project Lead (SWI)
HOW?

We carried out a needs assessment study to understand existing knowledge and awareness levels in the community on symptoms of diarrhea and its prevention and management.
We used the insights from the needs assessment study to develop radio episodes that featured the popular characters of GGSS. For an effective intervention we did the following:

1. **We conducted a formative research study to test the appeal of characters and comprehension of the radio episodes.**

2. **We disseminated the content through Community Radio (CR) stations and AIR* Shivpuri.**

3. **We recruited a community mobiliser to spread awareness about the program.**

4. **We fostered collaboration in partnership with Awaaz De Infosystems Pvt Ltd, which allowed broadcast of our content on an easily accessible IVR platform.**

* All India Radio
The process was extremely iterative in nature. It allowed us to:

1. Refine our messages based on findings from the ground. For example, we found that while knowledge of hand-washing is high, people didn’t quite understand how hand-washing protects them from diarrhea-causing germs. We revised messages to talk about how hand-washing helps in diarrhea prevention.

2. We carried out a dipstick in November 2014 to check the listenership of the program on CR stations. We found that there was low awareness about the program and the CR station’s low bandwidth meant poor listenership.

3. We moved the program to the national broadcaster AIR Shivpuri for a wider reach and supported it with an on-ground campaign. The campaign included a community mobilizer meeting with key influencers such as childcare center (aanganwadi) workers, auxiliary nurse midwives (ANMs), doctors, sarpanch², parents and children.
4. We promoted the program information with mobile stickers, and public service announcements (PSAs) through a variety of media, including auto rickshaws announcements.

5. Our colorful info cards with the IVRS number and AIR frequency and timings were a big hit.

We crafted and carried out careful research that used a highly participatory model to test whether exposure to content on mobiles is enough to effect change, and whether the change is enhanced if on-ground support is provided.
WHO?

The project reached 1.5 million people (200,000 children) through eight CR stations, an IVR system and AIR Shivpuri.

Nandita, a repeat caller, said she would save money by skimping on soap, but couldn’t do that anymore as her children insisted on having plenty of soap at home.
The target population was children aged 3 to 8 years, and their caregivers.
WHEN?

The research and the intervention ran from November 2014 to September 2015 with the most intensive messaging occurring during the peak diarrhea months of June to September.
**PHASE 1 (4 months)**

This included a needs assessment study; production of 14 radio episodes and their broadcast on eight CR stations.

**NOVEMBER 2014**

**FEBRUARY 2015**

**PHASE 2 (4 months)**

This was the campaign phase, which involved disseminating content on AIR Shivpuri, through the IVRS system, and on-ground engagement. The content was also broadcast on all eight CR stations*.

**JUNE 2015**

**SEPTEMBER 2015**

‘It is a nice and entertaining way to give messages to children. I personally have understood the importance of drinking clean water, using soap to wash hands, having clean toilets and surroundings.’

Shaila Rana, Henvalvani (listener)
EVALUATION and IMPACT

We partnered with Ideosync to conduct quantitative and qualitative research. The pre-post research design was used to evaluate the target group’s knowledge and attitudes of various outcomes related to diarrhea and ORS. We selected 702 respondents for the survey. Only families with children aged 3 to 8 years who reported listening to AIR at least once a week were included in the survey.
We divided the target population into two groups to understand the level of encouragement needed by people to access and act on the messages in our radio episodes. This division was a crucial part of our methodology.

1. **Nudge group**

   Every participant was a part of the Nudge group. This group represented the population of Shivpuri as all received GGSS content on AIR, CR station and IVRS. Participants were exposed to basic on-ground activities encouraging them to tune-in and call-in to access the content and leave feedback. A sample of 702 families was shortlisted to take part in the research.

2. **Push group**

   This subset of the Nudge group consisted of 200 families with the same access as the Nudge group. They were additionally exposed to more intensive on-ground activities by means of one-on-one meetings with the community mobilizer, encouraging them to tune-in and call-in to access the content and leave feedback.

* subset of the Nudge group

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* Evaluation and Impact
Families were tracked at two time points, May and October, 2015, to evaluate the caregivers' knowledge and attitude on various outcomes such as when and how to wash hands, using soap, ameliorating diarrhea symptoms, reducing the likelihood of diarrhea and knowledge and usage of ORS.

Children were tested on three outcomes:

1. **Hand-washing practices**
2. **Awareness of symptoms of diarrhea**
3. **Awareness of ORS function and its preparation**

Six year old Meenu Jatav from Kamlaganj, Shivpuri District is now a regular GGSS listener. Initially her parents did not allow her to use the mobile phone frequently, but once they heard GGSS themselves, they found the program very informative and entertaining. Meenu accessed it everyday after that.
Caregiver respondents in the Push group showed a significant improvement in knowledge of handwashing over their Nudge counterparts. For the diarrhea awareness and prevention indicators, the Push averages were higher than those for the Nudge group but not significantly so. For the ORS indicators, the Nudge group had a significantly higher average than the Push group. In the case of children, for all three types of indicators, the Nudge and the Push groups were not significantly different though the Push averages were higher than those for the Nudge group.

Children who recalled listening to GGSS messages showed seven times the improvement on knowledge of diarrhea symptoms as compared to children with no recall of the messages.

Parents who recalled listening to GGSS messages showed two times the improvement on knowledge of ORS preparation as compared to parents with no recall of the messages.
Deepanshi called the radio station team and shared that after listening to the GGSS show, she understood the benefits of drinking boiled water.

Ramji told Waqt ki Awaaz (CR Station) team that earlier, he wouldn’t wash his hands routinely, but after listening to GGSS, he understood that not washing hands leaves you vulnerable to disease. He now washes his hands with soap regularly before meals.
We also tested GGSS listenership amongst the participants. A total of 39.2% of the surveyed respondents were aware of GGSS and 17.6% of the total respondents confirmed listening to GGSS program on AIR.

Parents reporting GGSS listenership at endline had significantly higher improvements in the knowledge of handwashing, prevention of diarrhea and the preparation of ORS indicators, as compared to parents who did not report GGSS listenership at endline. Furthermore, the recall at endline was significantly higher for the Push group as compared to the Nudge group. Finally, caregivers from Push households reported a significantly higher decrease in the incidence of diarrhea in the last three months as compared to the Nudge households.
Children who had recall of GGSS listenership at the end of the project showed significantly higher improvements on the indicators testing knowledge of symptoms of diarrhoea, and ORS use compared to children with no recall of GGSS. The children with GGSS recall also showed improvement in the hand washing indicator when compared to children without GGSS recall, but this was not statistically significant.

Regardless of which group the participants were in, the research showed encouraging numbers in terms of awareness and behavior change. It is clear that both children and parents who listened to GGSS showed higher improvements from baseline to endline for most indicators pertaining to hygiene, awareness and prevention of diarrhea and knowledge of ORS, thus indicating that consistent exposure to the GGSS intervention has in fact resulted in enhancing their knowledge.
REACH

The monitoring data clearly showed that call rates had increased over time.

Call details: June 14, 2015 to September 13, 2015

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<table>
<thead>
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<tbody>
<tr>
<td>Total calls</td>
<td>7318</td>
</tr>
<tr>
<td>Total calls &gt; 4 mins</td>
<td>3228</td>
</tr>
<tr>
<td>Unique callers*</td>
<td>483</td>
</tr>
</tbody>
</table>

* All new callers

One mobile shop owner liked GGSS so much that he distributed GGSS mobile cards to anyone who came to his shop.

Building Communities of Change
With the community mobiliser encouraging Push group members to call on the IVRS and the GGSS promo being broadcast on AIR, the call ratio increased with an average of 35 calls made to IVRS on a daily basis, totaling 395 calls lasting more than four minutes between 1st July to 30th September 2015.

Pinki Jatav, housewife, received the IVRS number from her husband, who collected it from the GGSS community mobilizer in the market. After listening to the program, Pinki’s children started washing their hands with soap after using the toilet and before and after eating. They have also learnt how to collect ORS from Anganwadi centers and use it if they feel they are suffering from diarrhea. They listen to the program regularly now.
### IVRS DATA

<table>
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<tr>
<th>Period</th>
<th>Total calls</th>
<th>Calls above 4 minutes*</th>
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</thead>
<tbody>
<tr>
<td>June 14 to June 30</td>
<td>50</td>
<td>15</td>
</tr>
<tr>
<td>July 1 to July 31</td>
<td>1,822</td>
<td>824</td>
</tr>
<tr>
<td>Aug 1 to Aug 31</td>
<td>3,556</td>
<td>1,532</td>
</tr>
<tr>
<td>Sept 1 to Sept 30</td>
<td>1,874</td>
<td>838</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>7,302</strong></td>
<td><strong>3,209</strong></td>
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<table>
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<tr>
<th>Average calls per day (above 4 minutes)</th>
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<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>27</td>
</tr>
<tr>
<td>49</td>
</tr>
<tr>
<td>30</td>
</tr>
<tr>
<td><strong>29</strong></td>
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</tbody>
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*4 minute is the length of each episode.

Further analyses indicated that the Nudge activities had a large impact on calls to the IVRS, especially in the case of auto rickshaw activities, with the average call rate (above four minutes) increasing drastically (sometimes to 100) on days following the auto rickshaw activity. Towards the end of August, there was downtime for the IVRS due to unrest in Gujarat, where the IVRS server was housed, resulting in sporadic connectivity issues. Because of this the correlation between the IVRS promo on AIR and the volume of calls could not be determined.
CONCLUSION

We made a measurable impact on communities’ knowledge about diarrhea, and catalyzed behavior change.

This project succeeded in significant ways:

1. We used mobile technology successfully to reach marginalized people who would not otherwise have access to life-saving information. This demonstrates vast untapped potential to mobilize change in many realms using this platform.
2. **We used technology to empower children.**

3. **We demonstrated that children can be effective agents of change.**

4. **We employed innovative participatory research that can be replicated to evaluate other interventions.**

To achieve sustained impact, now that we have these results, Sesame Workshop India is seeking to collaborate with Government and corporations for help in supporting and scaling this program to further spread the key messages.

We have seen that *Galli Galli Sim Sim*’s goal of helping children grow smarter, stronger, and kinder is indeed possible anywhere in the country. The Building Communities of Change project has been tremendously exciting for SWI, children as well as community participants. We have demonstrated the huge potential that technology with a human touch holds for mobilizing communities, empowering the disenfranchised, and transforming public health landscape.
ACKNOWLEDGEMENTS

Building Communities of Change project has been made possible by generous support from Innovation Working Group Catalytic Grant.

Laxmi Garg, our community mobilizer in Shivpuri was instrumental in implementing the intervention.

The project would not have been successful without the wonderful support, enthusiasm and partnership of All India Radio (Shivpuri), Radio Dhadkan, Henvalvani, Alfaz-e-Mewat, Gurgaon Ki Awaaz, Kumaonvani, Radio Solan, Waqt ki Awaaz and PantNagar Janvani Samudayik Radio Kendra.

We also want to acknowledge and thank Awaaz.de Infosystems Pvt Ltd and Madhya Pradesh Mobile Vaani, our technology partners for hosting and supporting our program on the IVRS platform.

We thank Ideosync for its support and cooperation during the development of tools, data collection and data entry of this study. Kangkan Dev Choudhury was instrumental in the impact assessment of the intervention by designing the research and analysis of the data from this study.

We thank Prof. Sujoy Chakravarty, Research Advisor, for his valuable inputs.

A very special thanks to Sohaila Abdulali for her efforts in putting this report together and making it come alive. We would also like to acknowledge and thank our creative team of story & scriptwriters, producers and muppeteers for their continued support in making Galli Galli Sim Sim one of the best children’s programs in the country.