WORLD'S LARGEST READERSHIP SURVEY BECOMES LARGER NOW

Varghese Chandy and Tomson J Thundathil, Malayala Manorama

INTRODUCTION

The first National Readership Survey in India was commissioned in 1970 by The Indian Society of Advertisers and The Advertising Agencies Association of India. The Indian NRS was not very regular initially and the first four NRS surveys were conducted within a gap of 5 to 8 years between the surveys. The National Readership Studies Council (NRSC) was formed in 1995 by the three industry bodies namely ABC (Audit Bureau of Circulation), AAAI (Advertising Agencies Association of India) and INS (Indian Newspaper Society). After the constitution of the NRSC, the NRS was more regular in India with a gap of 1 to 2 years, starting from NRS V in 1995.

There were continuous improvements in the sampling and research methodology and definitions of the NRS in line with the changes in other countries. The first three National Readership Surveys used the readership definition and the measurement techniques similar to those used in the British NRS¹. During the third Indian NRS, there were discussions and debates on using alternative methods for readership measurement. However, the Recent Reading Technique using mastheads was retained. Some of the major changes incorporated later in the Indian NRS are covering of Rural India from NRS VII, reporting by districts in NRS XII and the introduction of 'Grouped Titles' method in the NRS XIII.

Challenges

Though there were many improvements in the sampling and research methodology of the NRS over the last few years, the publications are still facing many challenges on the measurement of readership.

- Huge fluctuations in the readership numbers across rounds
- Very low accuracy levels and high relative error at the basic reporting unit
- Continuous drop in Readers Per Copy (RPC)
- Decrease in readership even when there is substantial increase in circulation of publications
- Huge fluctuations in the number of people who can read various languages which directly affect the readership of publications
- Some of the changes in the sampling and research methodology of the NRS in the recent past have actually affected the readership of publications negatively

Proposed Changes

Based on the these challenges faced by publications, Malayala Manorama, one of the largest media groups in India decided to conduct a study on the challenges and improvements required for NRS. This paper deals with major issues faced by publications with the NRS, the findings of the pilot study done by Malayala Manorama and the proposed changes in the sampling and research methodology for the NRS to make it a robust survey in India. The major changes proposed for the NRS are as follows:

- Huge Increase in sample size
- Including Literacy as a parameter for population projection
- District-wise reporting with specific accuracy levels
- Reporting Micro-markets of top 8 metros
- Predetermined accuracy levels for each pop-strata
- Village Development Index for Rural Sampling
- Using HHT (Hand Held Terminals) for data collection
- Quarterly reporting
- Continuous Survey
- Reduced number of questions

DISCUSSION OF ISSUES

Problems were noticed during NRS XI and NRS XII where most of the publications in the country showed unusual fluctuations in readership compared to previous surveys. These fluctuations in readerships lead to a serious of discussions on the sampling

and research methodology of NRS, recent changes in the methodology and the requirement of a complete revamp. Based on the various discussions Malayala Manorama had with various research agencies and experts in readership research, the major reasons attributed to these fluctuations were found to be:

- Low sample size
- Projection and reporting by districts with very low sample size
- Sampling issues non-representative towns/ villages selected
- Literacy not included as a variable for population projection

Sample Size

India, with a population of 1.2 billion people spread across 593 districts in 35 states, is diverse in every aspect. There are 22 national languages and more than 10,000 publications in the country. There are around 90 Socio Cultural Regions (SCRs) in the country which are group of districts with homogeneous social and cultural backgrounds. With this heterogeneous population and multiple languages, getting a representative sample for any random survey is an extremely difficult task in India. This leads to the need of adequate sample size and sample spread for any readership survey.

If we compare the world average of the universe-sample ratio in readership studies with that of eight largest readership surveys in the world, the universe per sample for the two readership surveys in India is almost twice that of the world average². The universe-sample ratios of most of the other large readership studies are less than half of the world average. So the diverse population and the high universe sample ratio lead to a very low sample per reporting unit and high relative error for readership of publications.



Table 1 / Figure 1 - Universe per Sample for top 8 readership surveys in the world

Further to that, the universe per sample in rural India is as high as 5600 which is four times of urban India. The fact is that Rural India consists of more than half a million villages inhabited by a population of over 800 million. This leads to multiple challenges of geographical coverage, sample sizes, and selection of fieldwork centres.

The All India sample size of the NRS was around 0.2 million from 1999 (NRS VII) and even with this low sample size for a country with a populations of 1.2 billion, the readership figures were reported with wide acceptance and consistency. Until NRS X, the basic reporting units were 90 Socio-Cultural Regions by population strata and the sample size was allocated based on the total population of the SCR with an average universe-sample ratio of around 3,500 ranging from 200 to 6,500 in NRS X.



Figure 2 - All India total and rural sample sizes for various NRS surveys

Suddenly in NRS XI, the survey results were reported based on a part sample, which was just more than 50% of the previous round. This pushed the average universe-sample ratio to 6000 ranging from 2000 to 14,000. The reduced sample size also resulted in a reduced sample per the individual reporting units. The average sample per reporting unit was 2370 in NRS X, which came down to 1548 in NRS XI. Because of this huge drop in sample size, there were huge variations in readership for most of the publications compared to NRS X and the variance was found out to be higher in Rural India. The reduced sample size affected the relative error of even large publications at the individual reporting units.

Projection and Reporting by Districts with very low sample size

In NRS XII, the sample size was increased to 0.25 million, which was the highest sample size for any readership survey at that point of time. But even after this increase in sample size, the fluctuations in readership continued in NRS XII. If the problems in NRS XI were mainly due to the lack of sample size, the problems in NRS XII were attributed to a change in the methodology of sampling and population projection. Till NRS XI, sampling, population projection and reporting were done at the SCR by Population Strata level. This was changed to the district by population strata level in NRS XII. Because of these changes, the number of reporting units went up from 90 SCRs to 526 districts. The average sample per unit came down from 2370 in NRS X and 1548 in NRS XII to just 484 in NRS XII ranging from 58 to 4000. In the case of the universe-sample ratio, though the average was 3146, 65% of the basic reporting units showed a higher ratio than this.

Sampling Issues – Non-representative Towns/ Villages

There was another important problem noticed because of the two changes mentioned above - lower sample size in NRS XI and district-wise reporting in NRS XII. These changes lead to a reduction in the number of towns/ villages per sampling unit, which affected the spread and the representativeness of the selected towns/ villages. If the number of towns selected is not sufficient, the representative nature of the towns/ villages will be lost as the neighboring states and some times even the same state have different languages.

In the case of NRS XI, the number of sample towns and villages came down drastically and in most of the cases, just one or two towns/ villages were representing each population strata of every SCR. And based on the characteristics of the selected town/ village, the findings were extrapolated to each population strata of the entire SCR. So in some cases, the selected town/ village was on the border of the state in which most of the inhabitants read the language of the neighboring state. In such cases, the readership pattern of the entire SCR got changed and publications in the language of neighboring states benefited at the cost of the publications of native language.

Similarly, there were cases in which the literacy level of the selected towns/ villages was totally different from that of the SCR. In such cases, the readership of publications showed a considerable increase or decrease compared to the previous surveys. If we compare the readership of General Interest English Magazines (GIEMs) in India for the last few rounds of NRS, there were huge fluctuations in the figures and the fluctuations were mainly in rural, where the sample spread was affected more because of the low sample size.



Figure 3 - All India and rural Readerships of GIEMs in various NRS surveys

In the case of NRS XII, the problem was even worse since the total sample size was almost the same as NRS X whereas the number of sampling/ reporting units went up by 6 times. This left the research agency with no option but to select just one town/village per pop-strata of every district and this reduced the spread further affecting the representativeness of the selected towns.

Literacy Rate

Another important factor that needs to be taken into account, while estimating the readership in India is the wide variation in literacy levels, across various age groups as well as states/ districts/ population strata. While the younger generation is increasingly literate, the literacy level amongst the older generation is quite low. Similarly the literacy levels of large towns are very high where as that of smaller towns and villages are still very low.

The literacy level in India is 65% as per the latest census of India (2001) and is estimated at 77.2% among 12 years and above, according to the latest NRS. This again varies by population strata. While the literacy rate of top 8 towns is 90.4% and that of total urban India is 85.4%, it is just 65% in rural India as per the NRS. When we look at the state-wise literacy rates, Kerala tops the charts with the highest literacy rate of 92.6% where as it is as low as below 60% for some other states.

Since the level of literacy is very different even within a reporting unit, there is huge fluctuation in the readership of publications depending on the literacy level of selected town/ village. This problem is more acute in rural India since the literacy level is very and universe per sample ratio is very high in rural. Also since the number of villages selected were very low, it leads to the selection of non-representative villages. This could be solved to a large extent by including literacy as a parameter for population projection of the NRS.

NRS XIII	Base pop	Illiteracy	NRS XIII	Base pop	Illiteracy
Sample/prfl	280592	22.2	Sample/prfl	280592	22.2
Pop 000/prfl	819367	28.8	Pop 000/prfl	819367	28.8
			States		
Urban/Rural				(000's)	%>
	(000's)	%>	Kerala	26713	7.4
Urban	250791	14.6	Delhi	12686	10.3
Rural	568576	35.1	Maharashtra/Goa	83148	17.7
			Tripura	2567	18.4
Town Class (Urb	an)		Tamil Nadu/Pondicherry	54240	19
	(000's)	%>	Gujarat	42894	22.8
Top 8 Metros	64391	9.6	Punjab/HP/Chandigarh	26337	22.8
Other Metros	35945	11.6	Karnataka	44012	24.8
5-10 Lakhs	22925	12.1	Uttaranchal	6842	26
2-5 Lakhs	26894	15.8	West Bengal	65699	26.2
1-2 Lakhs	25826	15.9	Haryana	17600	26.5
< 1 Lakh	74810	20.2	Andhra Pradesh	62075	28.2
			Assam	20955	30.9
Village Class (Ri	ural Only)		Meghalaya	1840	32.4
	(000's)	%>	Orissa	30100	33.8
5000 Plus*	135164	29.8	Rajasthan	44050	33.9
2000 to 5000*	183454	35.7	Madhya Pradesh	47147	36.2
Less Than 2000*	249957	37.6	Chattisgarh	16217	37.7
Kerala: 30K - 1 L	19586	8.8	Uttar Pradesh	129802	38.6
Kerala: 20-30 L	7	15.4	Jharkhand	20650	40.2
Kerala: < 20 K	33	35.7	Bihar	63792	40.6

Table 2 - Percentage of Illiteracy in India by states and population strata

Key Issues

So the key problems that are affecting readership estimates in Indian NRS are low sample size and low literacy levels. When the sample size is low, it affects the accuracy level of the readership at the basic reporting units since the sample size of the unit will be less than the minimum required. This also leads to the selection of non-representative towns/ villages and reduced sample spread. Low literacy level will affect the readership estimates when the population projection is done without taking care of literacy.

PILOT STUDY

While we had several hypotheses, we did not have any assessment of how these issues impacted the readership estimates. We, therefore decided to conduct a pilot study in 3 editions from North, Central and South of Kerala, the state where Malayala Manorama daily is operating to assess whether the readership estimates differ due to sample size or weighting parameters. Malayala Manorama commissioned IMRB International to conduct this pilot study to test the following hypotheses:

- Is the Sampling an issue? Is it representative?
- Is the sample size an issue? Is the rural sample adequate? Do we need a larger sample for metros and other large towns?
- Is there a better way or parameters for weighting the data?

Challenges before us

To test the hypothesis and to understand the impact of the changes on readership estimates, the pilot study has to be comparable with NRS, but with marked improvement in methodology to reduce the fluctuations in readership. So the major challenges before us were:

- In-depth understanding of NRS including the recent changes
- Replicate the sampling and methodology employed in NRS
- Also, test the impact of larger sample size/ spread
- Follow the weighting methodology of NRS
 - > Also, assess the validity of Literacy as an additional descriptor for population projection

Key Objectives

The key objective of the pilot study was to estimate readership levels for various newspapers and magazines in the following three editions of Kerala representing three socio cultural regions of Kerala, using the same sampling and research methodology used in the NRS, but with enhanced sample size and spread as well as a refined weighting procedure.

- North Kerala Calicut edition
- Calicut and Wayand districts
- Central Kerala Thrissur edition
 Thrissur district
- South Kerala Trivandrum edition
 - Trivandrum district

Research Design

To enable comparison with NRS, we followed a similar research approach as the NRS:

- Selection of starting address from electoral role
- Selection of respondent through random selection method
- Recent Reading Method with Masthead exposure for estimating readership
- All major newspapers and magazines covered

Methodology



Figure 4 – Methodology used in the pilot study

Sampling

- All towns with population over 0.1 million included purposively
- Towns below 0.1 million population selected using the PPS (probability proportionate to size) within the given district
- In Rural area, villages selected using PPS within the given district

	Urban					
District	0.5–1 mn	0.2-0.5 mn	0.1-0.2 mn	< 0.1 mn	Total	
Wayanad	-	-	-	1	1	5
Thrissur	-	1	1	2	4	16
Kozhikode	1	-	1	2	4	15
Thiruvananthapuram	1	-	-	2	3	20
Total:	2	1	2	7	12	56

Table 3 - Number of towns selected in each district by pop-strata

Sample Size

- As per the NRS norm, eligibility of reporting the readership estimates for a publication is that "If the Relative Error for a publication at a reporting unit level is </= 25%.
- Looking at the Kerala market and the readership of the four leading daily newspapers, the minimum sample size per reporting unit needed was 800 (for a publication with 5% reach).
- So the minimum sample requirement for relative error norm being met at Edition level for Urban/ Rural
- Total sample of 6133 was achieved across 68 sampling units in 4 districts

	Urban					
District	0.5–1 mn	0.2-0.5 mn	0.1-0.2 mn	< 0.1 mn	Total	
Wayanad	0	0	0	97	97	230
Thrissur	0	392	201	204	797	750
Kozhikode	986	0	196	199	1381	727
Thiruvananthapuram	985	0	0	210	1195	956
Total:	1971	392	397	710	3470	2663

Table 4 – Sample size in each district by pop-strata

• The sample size for pilot study was 134% more than that of the NRS and the increase in rural was 220%. Comparison of sample size in the pilot study and NRS is as given below.

	PILOT	NRS	Diff	PILOT	NRS	Diff	PILOT	NRS	Diff
District	Urban	Urban	%	Rural	Rural	%	Total	Total	%
Wayanad	97	48	102	230	77	199	327	125	162
Thrissur	797	453	76	750	260	188	1547	713	117
Kozhikode	1381	652	112	727	217	235	2108	869	143
Thiruvananthapuram	1195	632	89	956	280	241	2151	912	136
Total	3470	1785	94	2663	834	219	6133	2619	134

Table 5 - Comparison of sample size in NRS and Pilot study in each district

Target Group

The Target Group for the pilot study is same as that of NRS.

• All individuals aged 12 years and above as in NRS.

Population Estimates

The approach we followed for population estimates was same as of NRS.

- Population projection was done based on Compounded Annual Growth Rate (CAGR) of Census 2001 over Census 1991
- Projection was done at the individual cell level

- Input data required in 1991 and 2001
 Individual population for each district (Urban & Rural)
- Projected population: Proj = $(2001*(1+(R/100))^{(years)})$

Levels of Projection

When the NRS has a two level projection using only age and gender for universe estimates, education was also used in the pilot study so that the difference in the literacy level would not affect the figures of the survey and the readership figures would be more accurate.

- Age X Gender
- Age X Gender X Town Class
- Age X Gender X Town Class X Education

Projection Parameters

Except education, the projection parameters used in the pilot study were same as NRS. In Urban, all towns with 0.5 million or more population were projected and reported individually. In the case of education, since this variable was not used for universe estimation in NRS, we had to use optimum number of levels of education in the pilot study. Since the sample size was not sufficient to use all the 8 levels of education, education was reclassified as four levels in such a way that the education of the individual would reflect the readership pattern as well as the profile. Following were the levels of each parameter used for the population projection:

- Population Class
 - Urban Vs Rural
 - Urban (Towns with population of 0.5 million or more v/s Rest of Urban)
 - Rural
- Age
 - ➤ 12-14 years
 - ➤ 15-19 years
 - ➤ 20-24 years
 - > 25-34 years
 - 35-44 years
 - \blacktriangleright 45+ years
- Gender
 - ➤ Male
 - ➢ Female
- Education
 - Illiterate
 - Below SSC
 - SSC+, but not Graduate
 - Graduate and above

What was done differently?

While we followed the same approach as NRS for sampling and research methodology, we made some key improvements as far as sample size and weighting parameters are concerned. The following were the major changes incorporated in the pilot study:

- Larger, robust samples
 - Samples per basic sampling and reporting unit were increased substantially.
 - Increase sample size enabled us to select more number of towns/ villages
 - > More number of towns/ villages helped to keep the sample spread and to maintain the representativeness.
- Use of Education as a weighting parameter
 - Large scale Government data was used for weighting/ projection
 - > Population projection was validated by an independent Demographer

FINDINGS

1. Readership levels were found to be much higher in the Pilot Study vis-à-vis NRS.

It is obvious that when the sample size went up considerably, more number of towns/ villages were selected keeping the representativeness of the universe intact.

- 18% increase in the Readership of Any Daily and 68% increase for Any Magazine
- 19% increase in the Readership of Any Malayalam Publication
- 67% increase in the Readership of Any English Publication
- 96% increase in the Readership of Any English Magazine.

	TOTAL				
	Pilot	NRS	Change		
		%			
Any Publication	76	64	18%		
Any Dailies	64	55	16%		
Any Magazines	56	34	68%		
Any Malayalam Publications	75	64	19%		
Any Malayalam Dailies	64	55	16%		
Any Malayalam Magazines	56	33	69%		
Any English Publications	7	4	67%		
Any English Dailies	3	3	16%		
Any English Magazines	6	3	96%		

Table 6 – Comparison of readership in Pilot study and NRS

2. Languages read with understanding of English language went up from 12% in NRS to 25% in the Pilot Study.

There was a huge difference in the share of people who can read English language with understanding in the pilot study compared to NRS. The estimate of adults who read English language showed an increase of more than 100% in the study. Also the increase in the readership of publications and magazines in particular was substantial. The huge increase in the number of people who can read English was well substantiated by the huge increase in the readership of English Magazines.

	Malayalam	English	Hindi	None
Pilot Study	91%	25%	9%	9%
NRS	91%	12%	5%	9%

Table 7 - Comparison of percentage of people who can read different languages in Pilot study and NRS

3. Variations in readership levels, ranking and changes in the difference between top publications

The readership of various publications showed a marked improvement in the pilot study compared to NRS. In some districts the ranking of the publications was also changed with No.2 in NRS becoming No.1 in the pilot study. Even the difference between top publications showed a substantial change.

4. Readership patterns were similar to that of circulation in the Pilot Study unlike in NRS.

In Kozhikode and Wayanadu districts, the No.1 publications were different in readership and circulation as per NRS where as in the pilot study the readership of top publications were in the same ranking of circulation in these districts. Similarly, in Thrissur and Trivandrum districts, the gap between the top 2 publications was huge in NRS where as circulation figures were very close. But the pilot study proved that the readership figures were also very close, similar to the circulation trend. This again reiterated the fact that low sample size of NRS had lead to non-representative sample which in turn affected the readership pattern of various publications.

	NRS			PILOT STUDY			
	Sample Lead of MM			Sample	Lead o	f MM	
	Size	ABC	NRS	Size	ABC	Pilot	
Districts							
Wayanad	125	30.6%	-6.0%	327	30.6%	37.9%	
Kozhikode	869	-5.2%	5.8%	2108	-5.2%	-8.1%	
Thrissur	713	-3.0%	-27.0%	1547	-3.0%	-10.3%	
Thiruvananthapuram	912	19.2%	95.6%	2151	19.2%	7.1%	

Table 8 – Comparison of the lead of Malayala Manorama (MM)

5. Differences in the demographic profiles – SEC, Education and Occupation

The pilot study also showed difference in the profile of the population like SEC, Education and Occupation compared to NRS. The profile revealed in the pilot study was more in line with the population census and other similar market studies.

Conclusion

The pilot study was conducted following the sampling and research methodology and weighting procedure of the NRS with increased sample size and literacy as an additional weighting parameter. The pilot study proved the hypotheses that a larger sample size lead to better sample spread and representative towns/ villages. The pilot study also reinforced the importance of literacy as a parameter for population projection. So, a larger sample size along with literacy as a weighting parameter could improve the accuracy of readership estimates.

INCREASED SAMPLE SIZE FOR KERALA IN NRS

We then shared the findings with the Technical Committee of NRSC. After a thorough review of these findings, the NRSC decided to increase the sample size for Kerala state as a test case in the next survey of the NRS. The sample size of Kerala was increased by more than 100%, with an increase of 260% in Rural Kerala.

	All Kerala	Urban	Rural
NRS XII	8680	5482	3198
NRS XIII	18343	6885	11458
% Increase	111%	26%	258%

Table 9 - Comparison of sample size in Kerala, NRS XII Vs NRS XIII

This increase in sample size helped to reduce the universe-sample ratio to below 1500, which is less than the world average, for Malayalam language readers (the mother tongue of Kerala) compared to 3000 for All India. In the case of Rural, the universe-sample ratio was 1800 for Kerala compared to that of 5600 for All India rural.

	Base po	p	Rural	
Sample/prfl	280592	2920	102040	5572
	Smpl	Univ/Smpl	Smpl	Univ/Smpl
Language F	lead with	n Understar	nding	
Hindi	132414	2621	36749	5755
English	77562	2039	13152	5163
Marathi	23138	2766	5427	6557
Bengali	19164	2897	5463	6658
Tamil	18990	2471	3836	6047
Malyalam	17476	1494	10194	1782
Telugu	16083	2874	4725	6369
Gujarati	14644	2514	2942	6271
Kannada	10938	2935	3074	6230
Punjabi	9415	1952	2500	4032
Urdu	9030	2209	1244	6236
Oriya	7219	2839	2544	6260
Assamese	4905	2731	1337	7767
None	62244	3798	34018	5873

Table 10 – Sample size by language read in NRS XIII

Regarding the other suggestion of including literacy as an additional parameter for population projection, number of cells for population weighting will go up by two times when the literacy is added as an additional parameter. This requires increased sample size to accommodate these additional cells. But the increase in sample size was implemented only in the case of Kerala state and the sample size for the rest of country was same as previous round. Also the weighting procedure has to be uniform across the country and a different procedure cannot be adopted for Kerala alone. So the NRSC was unable to implement this suggestion of including literacy as an additional parameter for population projection and they have decided to first test the increased sample size in Kerala and then take a decision in the next round of NRS based on the impact of increased sample size on the accuracy of readership estimates in Kerala.

	N	IRS XII		N	NRS XIII		
	Sample	Lead of	MM	Sample	ample Lead of		
	Size	ABC	NRS	Size	ABC	NRS	
Districts							
Kasaragod	334	-14.4%	4.8%	1091	-19.9%	-39.3%	
Kannur	727	-24.7%	-16.3%	1167	-24.7%	-27.5%	
Wayanad	125	30.6%	-6.0%	1106	15.8%	7.7%	
Kozhikode	869	-5.2%	5.8%	1635	-9.7%	-19.2%	
Malappuram	642	13.1%	-2.8%	1353	16.7%	0.9%	
Palakkad	414	18.6%	-3.7%	1217	19.0%	-3.0%	
Thrissur	713	-3.0%	-27.0%	1660	-1.4%	-36.7%	
Ernakulam	1523	68.9%	35.2%	1873	78.8%	25.9%	
Idukki	302	99.7%	74.6%	968	107.2%	160.0%	
Kottayam	451	194.7%	183.9%	1109	203.6%	166.5%	
Alappuzha	812	71.7%	56.5%	1197	72.8%	35.9%	
Pathanamthitta	291	206.4%	70.4%	1087	203.4%	155.4%	
Kollam	565	58.7%	75.5%	967	55.4%	30.1%	
Thiruvananthapuram	912	19.2%	95.6%	1913	17.9%	23.2%	

The results of this round of NRS showed a marked improvement in the readership levels in Kerala with this increase in sample size. Most of the anomalies in the earlier rounds of the survey which we felt were because of the low sample size got corrected and in most of the districts, the difference in readership between top 2 publications was in line with the difference in circulation.

Table 11 - Comparison of the lead of Malayala Manorama (MM)

PROPOSED CHANGES FOR NEXT NRS

Based on these changes tested in the last round of NRS, the NRSC appointed a Working Group from the NRS Technical Committee to study and recommend the various changes to be incorporated for the next round of NRS. The Working Group of NRS India has incorporated the following changes in the methodology of next round of the NRS:

1. Increase in Sample Size

The total designed sample size proposed for the next round of NRS is 425,000 which will be a 50% increase from the previous round of NRS. This increase in sample size will make sure the sample spread and representativeness of the sample towns/ villages.

2. Classification of Villages based on Village Development Index to have better representation of villages

With lower sample size in rural compared to urban and 70% of the total population staying in about half a million villages, sampling is always a big challenge in rural area. So to select representative villages for survey, the villages will be classified into various groups based on a Village Development Index prepared using various parameters available in Census on rural and sampling will be done based on this classification.

3. The number of questions to be curtailed to reduce respondent fatigue

Respondent fatigue was always a concern in NRS, with the total interview time ranging from 90 to 120 minutes. To reduce this, it is proposed to limit the interview time of two sections (Individual and Household) to a maximum of 30 minutes each by curtailing the sections on other media and product information.

4. Continuous Data Collection

Data Collection will be continuous which will nullify any seasonal promotional activities of publications.

5. Using HHTs for data collection

Starting with the top towns in the next round, NRS will convert from paper and pencil method to Hand Held Terminals (HHTs) in the next two or three years time to enable fast and error-free data collection. This will help to improve the quality of survey, total control of questionnaire flow, offer better field control, weekly upload of data direct from the field, complete project monitoring and reduced time taken.

6. District/ Group of Districts to be reported with sufficient accuracy levels

District by pop-strata will be the primary sampling unit and the reports will be available for all districts with minimum sample size to meet the specified accuracy level. In the case of small districts with less than 1 million population, neighboring districts will be merged for the purpose of reporting

7. Predetermined accuracy levels for various Population strata

Accuracy levels of various pop-strata will be decided in advance based on the importance of each pop-strata and the sample size will be fixed accordingly. Minimum sample size will be ensured for any basic reporting unit in such a way that the relative error will be less than 25% at 90% confidence level for publication of 7% or more reach. Given below is the error levels proposed for various pop-strata and the sample size will be fixed accordingly.

Pre-determined Error Levels							
	Minimum Reach	Relative	Confidenc				
Reporting unit	of publication	Error	e interval				
6 mn+ towns	0.5%	25%	90%				
4-6 mn towns	1%	25%	90%				
1-4 mn towns	5%	25%	90%				
.5-1 mn towns	7%	25%	90%				
Districts	7%	25%	90%				
States	1%	25%	90%				
Micro merkets							
of 6 mn+ towns	5%	25%	90%				

Table 12 - Predetermined error levels by pop-strata proposed for NRS

8. Literacy to be included as a weighting parameter

Literacy will be included as a parameter for population projection. This will help to increase the accuracy of readership estimates.

9. Quarterly Reporting

The reporting cycle will be every quarter and the moving annual average method will be used for reporting. The quarterly reporting along with moving average will help to reduce the huge fluctuation in the figures.

10. Top 8 Metros to be reported as 82 micro-markets

With the increasing importance of micro-markets, to start with, NRS will report 82 micro markets of top 8 metros (6 million+ towns) with specific accuracy levels. This will help publications and advertisers to target specific areas of large towns. This will also help to capture the readership of niche publications.

SUMMARY

Indian market is very complex with multiple languages and diverse culture. The huge number of socio-cultural regions, more than 10,000 publications in 22 languages and low literacy level make it a tough ground for any readership research. Unless the readership study is carried out with at most care, it will be a disaster. Inadequate sample size and not including literacy as a parameter for population projection are affecting the readership estimates of the current NRS negatively. The continuous fluctuation in the readership figures is a major challenge for publications.

The minimum sample size per reporting unit is very crucial for the accuracy levels of the readership estimates since the literacy level in India is very low. The diverse population within the primary reporting unit (district) also demands a significant sample size per district to get a representative sample. With the measures like literacy as a weighting parameter, Village Development Index for rural Sampling, continuous survey, predetermined accuracy levels for various pop-strata etc will definitely help to make NRS a robust readership survey in India.

^{1 &}quot;Replicating the EML Experiment in India", a paper presented by Ramesh Thadani at WRRS 2001

^{2 &}quot;Summary of Current Readership Research 2007" published during WRRS 2007