

# Fallibility of Opinion Polls in India

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There are many challenges in conducting election surveys that measure voter preferences correctly and when the results of these surveys are used to make seat predictions the margin of error can be large. As the record of pre-poll opinion surveys in the 2004 and 2009 Lok Sabha elections shows, the opinion polls have many weaknesses while attempting to make forecasts in a complex situation. In such a setting, the polls can be used as covert instruments by political parties to make seat predictions and thereby influence the electorate.

This is a slightly modified version of the article, "Status of Opinion Bills", which was published in the Web Exclusives section of EPW last week.

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The very mention of the word "opinion poll" immediately brings to the mind of people election surveys, exit polls<sup>2</sup> and seat predictions that appear in the mass media every time an election takes place in the country.

Psephology, the study of elections, began as an academic exercise at the Centre for the Study of Developing Societies (CSDS), Delhi in the 1960s for the purpose of studying the voting behaviour and attitudes of the voters. Psephology is now equated with pre-poll surveys and exit polls which are done by almost all media houses to predict the winners of elections. It has now been reduced to a media gimmick with allegations that it is used as a communication tool by a conglomerate of political parties, media and business houses with vested interests to influence voters. Media houses and television anchors in India have become modern-day "Nostradamuses" using opinion poll findings to forecast election results before the actual votes are cast, forecasts which have gone wrong on many occasions.

The accuracy of sample surveys depends on the following factors. One, the sample should be large enough to yield the desired level of precision. The size of the required sample for any survey can be statistically determined. Those who do not have the experience can use statistical tables that provide various sample sizes based on the population size of the universe. However in some cases, the sample size depends upon

the level of disaggregation for which the data is required. Two, everyone in the population should have an equal chance of being selected in the sample. Probability sampling based on random method is the best way for ensuring that everyone in the universe stands an equal chance of getting selected. Three, survey questions should be asked of the sampled respondents in a standardised manner. (Standardisation ensures that questions are asked in the same manner to all the sampled respondents as that will enable the respondents to respond accurately.) Four, there should not be any predetermined arbitrariness in interviewing the sampled respondents.

An accurate survey should follow some basic norms:

- Every member of the targeted population should have an equal chance of being selected for the survey. Probability sampling ensures everyone a fair and equal chance of getting selected which results in avoiding coverage error.
- The size of the sample to be selected should be adequate enough to achieve the required level of precision. The attempt should be to minimise sampling error.
- The questions to be asked should be simple and clearly worded so that the respondents can understand and answer them easily. The question to be asked should be worded in such a manner that it stimulates the respondents to answer it correctly. This reduces the measurement error though it cannot be totally avoided.
- The sampled respondents who are contacted and interviewed during the survey should have similar traits as those who could not be interviewed. Everyone in the sample who responds to the survey should have corresponding characteristics with those who

did not respond. This helps in avoiding non-response error.

**A History**

The popular media surveys started in the 1980s when Prannoy Roy (beginning in 1979-80), conducted opinion polls during elections to find out the mood of Indian voters. The proliferation of electronic media in the 1990s made the election surveys and exit polls popular in India, and they started capturing the imagination of people. Pre-election surveys and exit polls have since become a regular feature in the last one and half decades.

At the very beginning, most of the poll results were published only in news magazines like *India Today*, *Outlook* and *Frontline*. Slowly and gradually, the leading newspaper groups also started showing interest in publishing results of election surveys. The demand from the print media further increased the number of opinion polls being conducted in the country. What added to this growing demand was the advent of various television channels. With a large number of news channels competing against each other, the race for conducting election surveys and airing them as quickly as possible after election dates are announced has become the norm of the day.

While the election polls are of different kinds, it is the pre-poll and the exit poll which catches the attention of most people. The reason is simple – people are eager to know which party or alliance is likely to win the elections, and how many seats they will win. Exit polls became very popular in 1996, when Doordarshan, the government-owned television channel, commissioned an all-India exit poll. The fieldwork and data collection for this poll was done by the team at CSDS, and its findings were reported and discussed in a five-hour programme aired live on Doordarshan. Since then, there has been no election in India where exit poll results have not been televised the day polling gets over.

**A Mixed Record**

The history of opinion polls and seat predictions during the last four general elections has been a mixed bag of

successes as well as failures. Seat predictions based on election surveys done by various media houses during the general elections held in 1998 and 1999 were fairly accurate, and that gave a big boost to opinion polling. Tables 1 and 2 show seat predictions by the various surveys and the level of accuracy vis-à-vis the actual results.

**Table 1: General Elections 1998 – Almost Accurate Forecast**

| Seat Forecast              | BJP Allies | Congress Allies | NF+LF   | Others |
|----------------------------|------------|-----------------|---------|--------|
| DRS                        | 249        | 155             | 102     | 37     |
| <i>Outlook/A C Nielsen</i> | 238        | 149             | 123     | 33     |
| <i>India Today/CSDS</i>    | 214        | 164             | 127     | 38     |
| <i>Frontline/CMS</i>       | 225-235    | 145-155         | 120-130 | 32-52  |
| Actual result              | 252        | 166             | 96      | 23     |

The seat predictions were made on opinion polls conducted before the elections.

**Table 2: General Elections 1999 – NDA Slightly Overestimated**

| Seat Forecast              | BJP Allies | Congress Allies | Others |
|----------------------------|------------|-----------------|--------|
| Timespoll/DRS              | 332        | 138             | –      |
| <i>Outlook/CMS</i>         | 319-329    | 135-145         | 34-39  |
| <i>India Today/Insight</i> | 332-336    | 132-146         | 70-80  |
| <i>HT-A C Nielsen</i>      | 300        | 146             | 95     |
| <i>Pioneer-RDI</i>         | 313-318    | 140-150         | 84-86  |
| Actual result              | 296        | 134             | 113    |

The seat predictions were made on opinion polls conducted before the elections

During the Lok Sabha elections held in 2004, all the polls conducted by media houses predicted that the National Democratic Alliance (NDA) led by the Bharatiya Janata Party (BJP) would be able to retain power at the centre. The only difference between different polls was that while some suggested that the NDA would come back with an increased tally, others predicted a loss of some seats for the NDA alliance. Among the polling agencies and pundits there was complete unanimity in their predictions that NDA would win the elections. But the result was a shocker – the NDA lost the elections and the United Progressive Alliance (UPA)

**Table 3: General Elections 2004 – UPA Completely Underestimated**

| Seat Forecast               | BJP Allies | Congress Allies | Others  |
|-----------------------------|------------|-----------------|---------|
| NDTV- <i>Indian Express</i> | 230-250    | 190-205         | 100-120 |
| Aaj Tak-ORG Marg            | 248        | 190             | 105     |
| Zee-Taleem                  | 249        | 176             | 117     |
| Star-C-Voter                | 263-275    | 174-186         | 86-98   |
| Sahara-DRS                  | 263-278    | 171-181         | 92-102  |
| <i>Outlook-MDRA</i>         | 280-29     | 159-169         | 89-99   |
| Actual result               | 189        | 222             | 132     |

The seat predictions were made on opinion polls/exit polls conducted during the various phases of the elections.

led by Congress came back to power. Thus poll predictions based on election surveys during the 2004 elections (as seen in Table 3) went completely haywire in most cases.

With such a failure of pre-polls and exit polls, questions were raised about the failure to predict NDA's defeat during the 2004 Lok Sabha elections. Were the polls biased, incorrectly done or was there any political interference in showing the results of such polls? Was the sample size of the survey too small for forecasting or was the methodology wrong?

Five years down the line, the poll predictions made by different media houses and poll pundits during the 2009 general elections once again failed to predict the victory of Congress-led UPA (Table 4). Except for the poll conducted by the Congress themselves that predicted it will cross the 200 mark, everybody failed to predict the upsurge in favour of the Congress. The questions that arose after Lok Sabha elections 2004 resurfaced after the 2009 election.

**Table 4: General Elections 2009 – Predictions Failed to See the Congress Upsurge**

| Seat Forecast         | BJP Allies | Congress Allies | Others  |
|-----------------------|------------|-----------------|---------|
| STAR News-A C Nielsen | 197        | 199             | 136     |
| CNN-IBN               | 165-185    | 185-205         | 165-195 |
| NDTV                  | 177        | 216             | 150     |
| Headlines Today       | 180        | 191             | 172     |
| News X                | 199        | 191             | 152     |
| Times Now             | 183        | 198             | 162     |
| Actual result         | 159        | 262             | 79      |

The seat predictions were made on opinion polls/exit polls conducted during the various phases of the elections.

The opinion polling industry has failed to learn from its past mistakes, and the recent spurt in opinion polls giving a clear lead to the BJP-led NDA once again brings forth the dangers fraught in the misuse of opinion polls.

**The Methodology**

While election surveys, which look at voter concerns and preference, are the best means of deriving an accurate picture of the voting intentions and political attitudes of the Indian electorate (Butler, Lahiri and Roy 1995), opinion polls that are used to predict poll outcomes are, in Indian conditions, fallible. However, exit polls and post-poll surveys<sup>3</sup> could be relatively more accurate because of their

timing; they gauge the voting intention of voters after they have already voted.

Psephologist Yogendra Yadav says that in addition to timing, other crucial factors, including the sample size, sample design and the representativeness of the sample, ensure accuracy (Nath et al 1999). The choice of the survey method, sampling method and the level of training of enumerators who collect data determine the accuracy of the survey conducted.

Election surveys, whether pre-poll or post-poll, are based on a random sample drawn from the voter list of the Election Commission of India and are generally accurate as they yield a representative sample ruling out coverage errors and minimising sampling errors. On the other hand, exit polls, done on the day of elections, are based on quota sampling and are fraught with the risk of some sections/subsamples of the population being left out completely. Thus, the sample frame of exit polls is in most cases unrepresentative and suffers from both coverage and sampling errors.

The adequate number of respondents that should be interviewed in an election survey is statistically determined, and the size of the sample does not to a great extent determine its quality and credibility. The election surveys (as against pre-poll opinion surveys) in India do not go wrong as most of the polls have big samples. However, even if the sample size is large it has been observed that the choice of sampling methods has been unscientific and unable to statistically cover the universe of the study. As a result, the surveys are not representative and the seat predictions have gone wrong on several occasions.

Random sampling methods which are popularly used for pre-poll and post-poll election surveys have a greater chance of getting a representative sample as compared to a sample drawn purposively. Purposive or quota sampling of voters is popularly used by market research agencies for exit polls where a quota is fixed for sampling the respondents based on gender, education, caste, communities, different age groups, occupational background and class.

What accounts for such unrepresentative sample selections? India is a country

with 70% of its population living in rural areas. That means any election survey in order to be representative should try to conduct about 70% of its interviews in the villages and rural areas and only about 30% interviews in the towns and cities.

But this is not followed by most of the market research agencies that are engaged in election polling in India. The reasons for this anomaly can be attributed to inconvenience and high costs of conducting surveys in rural areas. Most of the polls suffer from an urban bias, which ultimately results in their sample being unrepresentative. A sample with more interviews in towns and cities is most likely to have more educated, rich and middle-class respondents. Thus the whole sample becomes biased and skewed, making it completely unrepresentative and rendering the survey inaccurate.

The third important component of an election survey, crucial for conducting it accurately, is the training of enumerators who carry out field investigations. Unlike in the United States and other European countries where an election survey is conducted telephonically, in India an election survey is conducted by enumerators who contact the respondents and conduct interviews in person. So for every opinion poll or election survey, training of enumerators a few days before field investigations is imperative so as to ensure standardisation.

However except for a few academic institutions, most of the market research organisations do not spend time on and invest financial resources in fieldwork training and practices. Instead they pick one-time trained enumerators from their pool and ask them to do the fieldwork for subsequent rounds of election surveys. But there are certain aspects of training – rapport building with sampled respondents, reading out questions from interview schedules and using survey instruments, following accepted fieldwork procedures and practices, standardised methods of asking questions and recording responses, and do's and don't's of surveys – that need to be done afresh for each round of an election survey. The absence of rigorous training leads to inaccuracies in data collection that

sometimes result in the failure of surveys and any data analysis based on it becomes fallible and questionable.

### Factors behind Inaccurate Predictions

The reasons for election predictions going wrong can be analysed at four levels:

First, there is the sociocultural diversity and volatility of India voters. Do voters form their voting decisions after the elections are declared or are there a significant number of voters who are floating voters and make their decisions at the last moment? Do the Indian voters reveal their voting intentions to the surveyors or do they conceal them arising out of extraneous factors?

Second, can the survey capture the complexities of elections arising out of a multipolarity of contests, party alliances and transfer of votes to each other, and geographical concentration of votes for some parties in some regions/states? Similarly, Indian elections witness factionalism in parties, rebel candidates and local-level settings that are difficult to ascertain in a survey.

Third, is the sample selection representative of the demographic of the voters and does the size of the sample determine the accuracy of the survey?

Fourth, how accurate are the various statistical models for seat predictions developed by pollsters?

**Sociocultural Diversity and Volatility:** Election studies conducted in the past have indicated that Indian voters are highly heterogeneous, with different socio-cultural practices and demographic backgrounds, and their voting patterns and preferences are varied. But at times, the multiple identities of Indian voters – region, caste community, language and religion – overlap, making it difficult to ascertain their political affiliation and electoral choices.

For example, Muslims in a state like Uttar Pradesh (UP) do not vote for the BJP as reported by election surveys conducted in the state in the last decade. However, there are variations in voting patterns of the Muslims residing in different regions of the state. Muslims in UP do not form a homogeneous group and

there are differences among them based on region, language and religious sect, which are reflected in their voting preferences. Thus, a large sample survey would capture that certain sections of Muslims in the state have voted for the BJP. Similarly, the voting patterns of voters in India vary from state to state. For example, certain issues in elections may have regional and sectional appeal and can form the basis of voting decisions. For others, the issues might not have any appeal and may not affect their voting decisions.

Pre-poll surveys might make seat projections that are off the mark. Election studies, done before or during the election campaign, have revealed that around one-fourth of the voters do not decide beforehand about who they are going to vote for and they have been termed as floating voters by pollsters. The floating voters make up their mind during election campaigns, and if there is a bandwagon effect in favour of any particular political party, the initial predictions can seriously go wrong.

Though pollsters while making election forecasts based on pre-poll surveys put in a rider that the predictions can change in subsequent weeks, its readers remember only the predictions and accordingly judge them after the actual outcome. During the UP assembly election of 2007, a post-poll survey revealed that a large number of voters from the upper castes who actually voted for the Bahujan Samaj Party (BSP), a dalit party, did not reveal their voting behaviour due to fear of caste-based violence. As a result most of the election surveys conducted during that election failed to predict a clear-cut win for the BSP led by Mayawati.

Similarly, exit polls, in which the voters are interviewed outside the polling booth after they have voted, do not always reveal voters' actual decisions. This happens because there can be a fear that a correct revelation of the party they voted for could be used by other political parties in subsequently identifying and targeting them.

**Multipolar Contests, Alliances, etc:** It is easier to forecast the election outcome in a state where there are only

two main political parties, provided the surveys get their vote shares correctly. However, in states where there are multipolar contests, making predictions become difficult as a slight error in estimating the vote share for any one party can completely upset the accuracy of the seat prediction.

Parties that contest elections in alliance also pose a problem in seat prediction, as it is very difficult to compute how the votes are shared between one another in an alliance. The geographical concentration of votes for some parties in some regions of the states also makes it difficult to make a correct seat prediction in spite of getting the vote estimates correctly. The result of the Karnataka Assembly election held in 2008 revealed that BJP had a 1% vote share less than Congress but it went on to capture the majority of seats. The Congress got more votes than the BJP in the state, but its vote was evenly distributed throughout the state which led to huge losses in winning seats.

**Method of Sampling and Size of Sample:** The most significant feature in the preparation of an opinion poll survey is the sample size and method of sampling. The sample size for any national- and state-level election study depends upon the level of analysis one intends to do. Thus if one wants to analyse the voting behaviour and attitudes of voters only at the state level, a survey of 1,500 respondents would be good enough. But if one also wants to do a region-wise analysis in the state, then the sample size should be bigger as there should be sufficient number of cases for disaggregate analysis.

Thus sample sizes for any election survey depend upon the level of disaggregate

data one requires for analysis. As long as the sample size is representative, seat predictions based on even a small sample size can come up with accurate results. On the contrary, a survey based on a large but unrepresentative size will yield a wrong seat forecast. Yogendra Yadav has argued that there is no guarantee that a bigger sample size will get you the right result. Bigger surveys only multiply errors 10 times (Nagaraj 2008)

The method of sampling used in an election survey and its accuracy also plays an important role in making a reasonably accurate election forecast. Thus a smaller representative sample can help make an accurate prediction as compared to a bigger unrepresentative sample. The method of sampling used in surveys done by market research organisations is usually not the most scientific method of survey research.

This becomes clear when measuring voting preferences and intentions of castes and communities. For example, in UP, a majority of the dalits, especially the Jatavas, have been voting for the BSP while the majority among the upper-caste voters have been supporters of the BJP and Congress. Similarly the voters belonging to the Yadavs have been staunch supporters of the Samajwadi Party. Thus, the sample in UP should be representative of these caste and communities, approximating the percentage of the population of these communities in the state.

So if a sample survey fails to gather the opinion of any important caste and community, the election predictions will be highly vulnerable to failure. Yogendra Yadav (2008) has argued that the method through which the sample is selected is crucial for the survey. Most Indian polls go wrong because their sampling

### Web Exclusives

The Web Exclusives section on the journal's website (<http://www.epw.in>) features articles written for the web edition. These articles are usually on current affairs and will be short pieces offering a first comment.

The articles will normally not appear in the print edition.

All visitors to the website can read these short articles. Readers of the print edition are invited to visit the Web Exclusives section which will see new articles published every week.

methodology is poor which makes the sample profile unrepresentative. Though a scientific and representative sample determines the accuracy of the survey, there is no guarantee that a forecast based on the survey will be right. A survey has its limitations as it cannot capture the diverse and nuanced complexities and undercurrents of electoral behaviour and choices in India.

### Conclusions

Contrary to their foreign counterparts, media opinion polls on elections in India have focused more on predicting the number of seats that major political parties are going to win or lose in the elections rather than on understanding the key issues facing the electorate. A recent sting operation on polling agencies also revealed that seat prediction

figures are on occasion manipulated in favour of their clients.

Thus election surveys have been reduced to a media gimmick used only to predict the outcome of election results that quite often end up wrong or off the mark.

### NOTES

- 1 A post-poll survey is for measuring voting behaviour that has been developed in India. It is a unique method of conducting election surveys which was pioneered by the Centre for the Study of Developing Societies (CSDS) in the 1960s wherein the voters were interviewed at home after the polling had been completed. The post-poll survey for measuring voting behaviour is purely an academic exercise done with the purpose of doing a post mortem analysis of the elections (Kumar and Rai 2013).
- 2 An exit poll as its name overtly suggests is an election survey which is conducted among voters as they come out or exit from the polling station after casting their vote. This survey is also known as Election Day polling as the survey is conducted and completed on the day of polling (Kumar and Rai 2013).

- 3 A pre-poll survey as the name indicates is an election survey that is conducted before the elections are held for measuring popular choices about political parties, contesting candidates and political leaders. It also helps in measuring voting behaviour amongst different section of voters (Kumar and Rai 2013).

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