# Methodology for Estimation of Domestic and Foreign Tourists Visit at District Level in India 

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## I. Introduction

Ministry of Tourism compiles data on domestic and foreign tourist visits in State/ UT based on the information received from the State/ UT Governments. Such information at State/ UT level is generally collected by State Tourism Departments on the basis of administrative records and returns. In many cases, the information supplied does not cover the same-day visitors, visitors staying with friends and relatives, etc. Doubts have been also expressed by experts about the reliability of the data on domestic and foreign tourist visits released every year.

A need was felt to prepare a standard methodology for estimation of number of visitors at district level which can be used by the State/ UT Governments. This methodology should enable the compilation of such data on monthly basis. The methodology should also help in preparation of estimates of number of visitors for some period after the base line survey, mainly based on the information to be collected from the accommodation units without resorting to regular large scale survey.

Keeping these requirements in view, a methodology has been prepared which will be initially used in the tourism surveys to be commissioned by the Ministry of Tourism in 5 states namely, Andhra Pradesh, Delhi, Jharkhand, Maharashtra and Punjab. The details of the methodology are given in the subsequent paragraphs.

## II. Definitions

The definitions of various terms to be used in the survey are given below.

## Usual place of Residence:

The usual place of residence of a person is the village/ town where the person has been staying continuously for at least 6 months prior to the date of the survey.

## Usual Environment:

The usual environment refers to the geographical boundaries within which a person moves within his/ her regular routine of life.

## Trip:

A trip refers to the travel by a person from the time of departure from his usual environment until he/ she returns. It, thus, refers to a round trip. A trip may be made up of visits to different places.

Visitor:
A visitor is a traveller taking a trip to a main destination outside his/ her usual environment for any main purpose (business, leisure or other personal purpose) other than to be employed at the place visited.

## Tourist:

A visitor is classified as a tourist if his/ her trip includes an overnight stay. A tourist is also referred to as an overnight visitor.

## Same-day visitor:

A visitor is classified as a same-day visitor if his/ her trip does not include an overnight stay. A same-day visitor is also referred to as an excursionist.

## Exclusion:

The same-day visitors at a tourist destination for whom the tourism destination is part of their usual environment, are not considered same-day visitors for the purpose of this survey.

## Foreign Visitor:

A visitor having a foreign passport will be treated as a foreign visitor. Even a NonResident Indian (NRI) will be treated as a foreign visitor. NRIs have Indian passports but may be living, or are likely to live, in other countries for 6 months or more.

## Domestic Visitor:

A visitor who is a resident Indian, will be treated as a domestic visitor.

## Tourist Destination:

The tourist destinations would generally be as defined by the State in terms of geographical area and tourist interest. A tourist destination should be a clearly identified area/ location. A tourist location could be a ticketed closed area, non-ticketed closed area, or an open area without clearly specified boundaries. It may be a location maintained by Central

Govt., State Govt., local body or any other organization, including those run by the private sector. A tourist location may consist of more than one tourist spots. However, the following norms should be adhered to for identifying a tourist location as a tourist destination:
(i) Each ticketed tourist location will be considered as one tourist destination irrespective of the number of tourist spots at that location covered under the common ticket.
(ii) If there are 2 or more tourist spots within close proximity which are not ticketed, the location would be considered to be a single destination if a visitor usually visits most or all the spots in the same visit.

## Town:

Definition of the town will be same as that used in 2001 Population Census of India.

## III. Objective

The field survey in a State will be conducted for a period of 12 months in all districts of the State. The survey will be used to obtain the following month-wise information for each district:
a. Estimated number of visits
(i) Visits by overnight visitors- staying at accommodation units;

- staying with friends and relatives
- others, such as those staying in tented accommodations provided by State Govt. or by any other charitable organizations, etc.
(ii) Visits by same-day visitors
b. Profile of visitors, their expenditure pattern, purpose of visits, etc.
c. Occupancy rates and direct employment in accommodation units.


## IV. Approach

To meet the objectives, first the tourist destinations have to be identified before the start of the survey. Two possible variable studied for identification of the tourist destination werenumber of tourists and number of accommodation units. However, interaction of the consultant with the state authority revealed that past data on number of tourists at various
destinations are generally not available. Similarly, the analysis of the unit level data of Economic Census 2005 revealed that data on number of hotels below the district level are not available. Therefore, first towns important from tourist angle have to be identified. All the tourist destinations in the identified towns will be covered in the survey. In the identified towns two types of survey, namely Survey at tourist destination and Survey of Accommodation units will be done. The survey of tourist destination will broadly provide the estimate of tourists for leisure purpose, however, the purpose of the survey is to have an estimate of tourists for all type of purposes such as visiting friends and relatives, business, etc. Similarly, the Survey at tourist destination and at Accommodation unit will not provide information about the visitors staying with friends and relatives and in accommodation units but not visiting any tourist destination as well as same day visitors not visitors not visiting any tourist destinations. To get these information survey at important Entry/Exit Points of the district will be also conducted. The ratio obtained from this exit survey will be used to find out the estimate of tourist for non-leisure purposes. However, this adjustment will be done only at district level.

The district level estimates will be worked out by adding the leisure tourists at all the towns covered in the survey and multiplying it by the ratio of total urban population of the district to the total population of the towns covered in the survey. The estimate of non-leisure tourists will be worked out from the data of exit survey and added to the estimate of leisure tourists to find out the district level estimate of visitors. The state level estimate of visitors (tourists and same day visitors) will be worked out by adding the district level estimates of visitors.

## V. Methodology

The methodology envisages three stage sampling. The first stage units will be the towns important from tourism perspective, the second stage units will be the tourist destinations in the selected town or linked to the selected town, and the visitors within a tourist destination will constitute the third stage units. The procedure for selection of first, second and third stage units are given below:

## (i) Selection of Towns important for Tourism

In the absence of reliable information about the number of tourists or accommodation units at tourist destination, towns, which are important from tourism perspective, will be identified in each district in consultation with the State Government. Apart from such towns,
the towns which cater to the accommodation needs of visitors to important tourist destinations located in non-urban areas, will also be identified. For the latter cases, only one the most important - town will be identified with one tourist destination. Therefore, as per this methodology, the first stage in this survey will be the identification of towns important for tourism purposes.

## (ii) Selection of Tourist Destinations in the Selected Town

All the tourist destinations in a selected town will be covered in the survey. In case the number of tourist destinations in the selected town is large, only the important ones will be covered in the survey.

## (iii) Selection of Visitors at a Tourist Destination for brief profiling

(a) Sample size of visitors at district level

The sample is required for estimating the number of visitors at district level from the data collected at destination/ spot level. Statistically, the sample size may be obtained from the following expression,

$$
\mathrm{n}=\mathrm{Z}_{1-\alpha / 2}^{2} \mathrm{p}(1-\mathrm{p}) / \mathrm{d}^{2}
$$

where $\mathrm{p}=$ anticipated proportion to be estimated $100(1-\alpha / 2) \%$ is the confidence level and
$\mathrm{d}=$ absolute precision required on either side in the proportion in percentage points

Statistically, we require a sample size of about 400 respondents ( 384 to be exact) to get estimate of a parameter with a precision of $5 \%$ points and $95 \%$ level of confidence. As the data is required on monthly basis this sample size may be required on a monthly basis.
(iv) Distribution of Sample Size in Towns and at Tourist Destinations
(a) Distribution of sample size amongst selected towns in a district: The district sample size of 800 visitors will be distributed among the selected towns in proportion to the 2001 Census population of these towns.
(b) Distribution of sample size among tourist destinations in a selected town: If there are more than one tourist destinations in a selected town, the sample size allocated for the town will be equally distributed among the tourist destinations.

## (c) Selection of days for survey of visitors in different months

The survey will be conducted during all the 12 months of the year at each selected destination. Information about important festivals, fairs, religious events at the selected tourist destinations will be collected in advance for the 12 -month period. In a particular month at a particular destination, survey will be done during 2 weeks. In the first week, first 3 days of the week will be covered, and in the second week last 4 days of the week will be covered. For this purpose, first day of the month will be considered as the first day of the week. The dates of survey at a tourist destination during the 12 months will be as follows.

| Month | Weeks | Days of weeks | Dates of the month |
| :--- | :--- | :--- | :--- |
| First | First and Third | $1^{\text {st }}$ week: 1-3 days <br> $3^{\text {rd }}$ week: 4-7 days | $1,2,3,18,19,20,21$ |
| Second | Second and <br> Fourth | $2^{\text {nd }}$ week: $1-3$ days <br> $4^{\text {th }}$ week: $4-7$ days | $8,9,10,25,26,27,28$ |
| Third | First and Fourth | 1 <br> $4^{\text {st }}$ week: $1-3$ days <br> $4^{\text {th }}$ week: 4-7 days | $1,2,3,25,26,27,28$ |
| Fourth | Second and Third | $2^{\text {nd }}$ week: $1-3$ days <br> $3^{\text {rd }}$ week: 4-7 days | $8,9,10,18,19,20,21$ |
| Fifth | First and Second | $1^{\text {st }}$ week: 1-3 days <br> $2^{\text {nd }}$ week: 4-7 days | $1,2,3,11,12,13,14$ |
| Sixth | Third and Fourth | $3^{\text {rd }}$ week: $1-3$ days <br> $4^{\text {th }}$ week: 4-7 days | $15,16,17$, <br> $25,26,27,28$ |
| Seventh to <br> Twelve | Above pattern <br> will be repeated |  |  |

The date and week on which important tourism event is scheduled to take place at the selected tourist destination will be positively covered. If the important tourist event at the selected tourist destination falls outside the selected week and dates, the nearest week/dates will be substituted by the week/dates of the special event.
(d) Canvassing of schedules to the visitors for brief profile

The monthly sample size of visitors at a selected tourist destination should be distributed equally on the 7 days of the survey work (in 2 weeks) at the destination. The services of 2 investigators would be required on the selected days at a non- ticketed tourist destinations. The first investigator will basically count the number of visitors and second investigator will canvass the schedule to seek the information about overnight/ same-day visitors, domestic/ foreign visitors, etc. At a ticketed tourist destinations perhaps one
investigator will be able to canvass the schedule because counting of the visitors may not be required.
(v) Details of the Surveys

## (A) Survey at Tourist Destinations

A survey of visitors at tourist destinations has to be done to obtain the following information:

## (a) Total number of visits

(i) Ticketed Destinations:- If the tourist destination is a ticketed destination with differential pricing for domestic and foreign visitors, the data on number of foreign and domestic visits separately during any day would be available from sale record of tickets. If the destination has common ticket for both domestic and foreign visitors, then an assessment of the distribution of visits by domestic and foreign visitors would have to be made by counting the visitors at the entry point(s). To capture the variations in visitors number on different days of the week as well as at different time periods of a day, this exercise would have to be carried out at different periods of time of the day, and on different days of the week. Many destinations attract large number of visitors during specific periods of the year, such as Kumbh Mela, Suraj Kund Mela, etc. Such periods should be identified in advance, and the survey should cover such specific periods.
(ii) Non-Ticketed Destinations:- In such cases, the total number of visitors, during the day, along with its break-up into domestic and foreign visitors, has to be assessed by counting the number of such visitors at specified time slot at entry point (s). If there are more than one entry points to the tourist destination, all should be covered by pre-specified rotation, for counting the number and broad distribution. If there is no specific entry point, investigator will have to notionally designate appropriate points as entry points based on the flow of visitors to such a destination.

## (b) Brief Profile of Visitors

Break-up of number of visitors into overnight visitors staying at accommodation units, overnight visitors staying with friends and relatives, other overnight visitors, and the same-day visitors, separately for domestic and foreign visitors, has to be obtained. For this, a small questionnaire, comprising 5-6 questions, has to be
canvassed. As getting this information is the prime objective of the survey, the sample size should be adequate to provide the desired breakup of different type of visits.

In para IV (A)(ii)(a), the desired sample size at district level has been worked out to be 400 visitors. However, it has been decided that the number of visitors to be selected for this short profile survey will be 800 per district per month.

## (B) Survey of Accommodation Units

All the accommodation units (hotels, tourist lodges, dharamshalas, motels, Govt./ private companies, guest houses, etc.) in the selected towns will be listed with the help of Municipal Corporations or other competent authorities. If a tourist destination not located in the town is linked to a non-urban tourist destination in terms of providing accommodation facilities to tourists visiting that destination, the list of additional accommodation units located near such tourist destinations will also be included in the list of accommodation units of the town.

The accommodation units so listed will be grouped in the following categories:
(ii) Classified hotels
(iii) Other accommodation units-
a. Having more than 20 rooms
b. Having 10-20 rooms
c. Having less than 10 rooms

From all the selected accommodation units, the following 2 types of information will be collected:
(i) Particulars of the accommodation unit- Apart from the identification details, the information would be collected on number of rooms, number of beds, total number of persons employed, annual turnover, etc. This information would be collected initially, and thereafter updated every quarter along with the updating of the list of accommodation units.
(ii) Information about overnight visitors- Based on the records available with the accommodation units, information on number of guests checked-in, number of nights spent, whether domestic or foreign, residency status of the tourists (within the state, within country, outside country), etc. would be collected. This information has to be collected every month for the preceding month.

All the classified hotels would be covered for collecting both the information. For the remaining 3 categories of accommodation units, $10 \%$ of the units in each will be covered. These $10 \%$ accommodation units will be selected by using circular systematic sampling method.

In metropolitan cities, list of all the accommodation units will have to be prepared for the survey work.

For collecting information about the number of visitors and their other details as well as information about the accommodation units for a particular month, the selected accommodation units will be visited in the $1^{\text {st }}$ week of the succeeding month.

## (C) Survey at Entry/Exit Points of the district

The survey at the tourist destinations will not be able to capture the following categories of visitors:
(a) visitors staying with friends and relatives and not visiting any tourist destination;
(b) visitors staying in accommodation units but not visiting any tourist destination;
(c) same day visitors not visiting any tourist destination

For having an idea about the total number of visitors in the district, information about visitors collected at tourist destinations has to be supplemented by information on the above categories of visitors. To meet this objective, exit survey of the visitors at the major exit/ entry points of the district will be conducted to have information about the above mentioned categories of visitors as well as for detailed profiling of the visitors. In view of the fact that profiling of the visitors is not likely to change over a short time interval, profile of visitors will be generated only at district level on quarterly basis. The requirement of the sample size for this exercise would also be less. It has been decided to conduct the interview of 200 visitors every quarter in each district.

As the information collected in the exit survey used for estimating the number of nonleisure visitors in the district, the exit survey will be conducted only in the first month of the quarter so that its result can be used for the three months of the quarter. All the four weeks as well as the days (week days and weekends) in a month should be covered on representative basis.

## VI. Way forward

As the monthly data of visitors will be required by the State/ UT Governments in future also the outcome of this survey will be utilized in the following manner by the State/ UT Governments.
(a) 5 States currently being covered in the survey:

The list of accommodation units in the selected tourist destinations in these States/UTs compiled by the consultant will be made available to the State/ UT Governments. After the completion of the survey, State/ UT Governments may update this list on a regular basis. The information about distribution of various categories of visitors obtained from the current survey will be appropriately combined with the information on number of visitors staying in accommodation units to estimate total number of visitors in the district in subsequent periods.

## (b) States/ UTs not being covered in the survey:

The baseline survey of the type being conducted in 5 states may have to be conducted in these States and the same methodology as suggested in the preceding para would be used to prepare the monthly estimates of visitors.

