

## INTRODUCTION

Learning is a natural and continuous process; it arises from our experiences. Hence, learners (adults/children) in educational programmes (formal/non-formal) are already engaged in learning. This natural learning can be built upon to achieve planned learning.

Learning numeracy or acquiring basic mathematical concepts and skills is continuously taking place as a result of everyday living experience as these are too close to life and living. Hence it becomes important that natural and continuous learning from life situations in this regard should be the basis of planned adult education programmes. In the programme described, understanding the existing numeracy knowledge and practices of the people in the rural areas of Tamil Nadu was considered vital for the planned programme to be relevant to the life of the learners. The present study is an effort in this direction.

The purpose of the study is to evolve ways of integrating what people have with what they need in terms of numeracy learning and practices.

The objectives of the study were :

1. To study the present numeracy practices in day to day life of the people in rural Tamil Nadu with special attention to gender and caste;
2. To study the implications of these practices for teaching and learning numeracy in adult education programmes.

A sample of seven villages was drawn from a total of 15,735 villages in 16 districts in Tamil Nadu. In drawing the sample, the following procedure was followed :

On the basis of the major dialects of Tamil Language, four dialect regions (Northern, Southern, Central and Western) and the districts that come under each of these regions, as identified by linguistic studies were taken.

Each region with its cluster of districts was made into two clusters making up a total of eight clusters of districts.

From the eight clusters seven districts were chosen on the basis of their SC/ST (Schedules Castes/Scheduled Tribes) population. Districts with a higher percentage of SC/STs were selected.

A list of villages with a population of over 5000 up to 10,000 was made. This was to ensure representation of different occupations and different castes. A total of 1407 such villages was found in the seven selected districts.

Of these villages, those with a population of over 20 per cent of SC/STs were listed. The number of such villages varied with districts.

For each district, the villages with an SC/ST population between 20 and 50 per cent were represented by one chit and the villages with the SC/ST population between 51 and 75 per cent were represented by two chits. These chits were shuffled and drawn. Four different persons participated in drawing lots. Thus a random sampling procedure was made sure of.

The following chart presents the dialect regions, the districts, the taluks and the villages in the sample.

CHART : Dialect Regions, Districts, Clusters, Taluks, Villages

Dialect Regions	Districts & Clusters	Taluks	Villages
1. Northern	1. <b>Chengalpattu</b> , Chennai. 2. North Arcot*	Sriperumbudur Vellore	Mangadu Venkatapuram Alamelumangapuram
2. Southern	3. Madurai Tirunelveli <b>Ramanathapuram</b>	Rajapalayam Agasteeswaran	Chozhapuram Theroor
3. Central	4. <b>Kanyakumari</b> * 5. <b>Tiruchi</b> Pudukkottai	Karur	Pavithram
	6. Thanjavur <b>South Arcot</b>	Viruddhachalam	M.Parur
4. Western	7. Coimbatore <b>Nilagiri</b>	Gudalur	Nelliyalam
	8. <b>Salem</b> Periyar Dharmapuri	Namakkal	Kollimalai (Ariyur Nadu)

\* Districts indicated as exceptional from the point of view of dialects by the linguists. Pilot study was conducted in the villages indicated in North Arcot.

The total number of respondents was calculated on the basis of the total population in the seven villages and the time required to conduct the interviews. Total sample size was calculated to be 350. The sample size for each village was determined by the size of the population. Following table presents the details of the village, population, calculated sample size and the actual sample size.

Table 1 : The population and sample in the selected villages

Sample village	Population	Calculated sample size	Actual sample size
1. Mangadu	10,976	76	76
2. Chozhapuram	6,775	47	32
3. Theroor	8,914	62	40
4. Pavithram	5,575	38	40

5. M.Parur	5,314	36	25
6. Nelliyalam	10,221	71	68
7. Kollimalai	2,950	20	23
<b>Total</b>	<b>50,725</b>	<b>350</b>	<b>304</b>

The participants in the study were both men and women; a majority in the age group of 15 to 35 years; about one half were Scheduled castes / Scheduled tribes (SC/STs) and the other half were other castes; majority were Hindus; majority were married and belonged to a unitary family of two to five members; nearly half were illiterates or school ‘drop-outs’ and the other half had completed four to eight classes; majority were agriculturists or agricultural labourers; majority were residents of the village since birth; majority had not travelled outside the village.

Data were collected through a specially developed interview schedule for the purpose. Pilot study helped in developing the schedule. The questions in the schedule were open ended.

The interviewees were selected at random. With the help of the layout of the village, the number of adults per street was decided on the basis of the number of households. As gender and caste were in focus, both men and women were interviewed and care was taken to include about half of scheduled castes / scheduled tribes.

Four investigators, two teams of two each conducted the interviews after orientation and demonstration in conducting interviews. The data were collected from July 1983 to January 1984.

The data analyses and the findings of the study are presented in the following pages.