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ADULT EDUCATION PROGRAM IN RAPTI ZONE

(A Report of an Evaluation Study)

Submitted
to
USAID/Nepal

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Language Culture Training & Research Centre

(LCRC)

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P R E F A C E

It is a matter of great pleasure for us to undertake this evaluation study of "Adult Education Program in Rapti Zone" under contract with "USAID/Nepal". I sincerely hope that the findings of this study would be very helpful in undertaking specific steps toward enhancing the quality and positive impact of the adult education program.

Many persons have generously contributed their time and ideas for successful completion of this study. My sincere thanks go to Mr. Richard Nishihara and Mr. S. L. Shrestha of USAID/Nepal for their help and encouragement at different phases of the study.

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We look forward to undertaking many research studies in the future.

Bhoj Raj Marahatta
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Abbreviations used in the text

AE	=	Adult Education
APROSC	=	Agricultural Projects Services Centre
DEO	=	District Education Officer
HMG	=	His Majesty's Government (of Nepal)
IRD	=	Integrated Rural Development
MOE	=	Ministry of Education
NFE	=	Non-formal Education
RIRDP	=	Rapti Integrated Rural Development Project
USOM	=	United States Operation Mission

Chapter I

INTRODUCTION

1. Historical Background:

The need for a literate citizenry became apparent when the political change of 1951 ushered in an era of democracy in the country. Consequently, Nepal witnessed a rapid growth in the expansion of educational institutions. Meanwhile, the planners and the educationists of Nepal began to realize the importance of operating a literacy program to mobilize the huge mass of rural populace in rural developmental activities. And it was a major challenge of that time to initiate a relevant and effective literacy program in the context of the country's topographically varied feature and an almost illiterate rural population.

In 1956, Nepal started its first literacy program with considerable assistance from the USOM/Nepal. By 1972 within a period of seventeen years, a little above three hundred and thirteen thousand adults were made literate*. Further 447,238 adults out of the targetted 525,000 (i.e., 85% of the target population) benefitted from the literacy programs during the five year period from 1973 to 1977. Apart from these quantitative achievements, some programmatic changes also occurred during the last two decades.

In the initial phase of the adult education program, the emphasis was on making adults learn 3 R's and the program had a duration of six months. In the early 1960's, a functional component of three months' duration was also added which included health education, agriculture and home science, and cottage industry. It is noteworthy that in this functional literary program full six months was allotted to literacy

* See Literacy and Non-formal Adult Education in Nepal.
(in Nepali), Ministry of Education, 1979.

and an additional three months to the functional program related to the application of literacy skills in the context of rural life situation. It is also significant to note that, in the initial phases, the radio was also used as the medium to convey the message of adult education programs.

In 1977/78, the Ministry of Education experimented with two types of programs -- (1) "a Uni-Message" program which included a literacy component plus one of such functional areas as agriculture, health, social reform and panchayat, and (2) a "Multi-Message" program which included literacy and all four areas of the functional components. The multi-message program proved to be more effective. Since then, the Adult Education Division of the Ministry of Education has been organizing two types of literacy programs -- (1) "Literacy" and (2) "Functional Adult Education Program".

In 1978, the Research Center for Educational Innovation and Development in collaboration with World Education New York undertook a pilot project on "Integrated Non-Formal Education Program" for a period of two years. In this pilot phase different types of stimulating materials (such as thematic posters, flexi-flans, flip charts and muppets) were prepared and the participatory approach of teaching and learning were tried out. The materials and the analytical/participatory methods proved to be interesting as well as effective. After two years of operation, this program has been handed over to the Ministry of Education for wider dissemination. Thus, as a matter of speaking, Nepal has by now some significant experience in the area of adult education so far as the designing and implementing relevant and effective literacy programs are concerned.

With the literacy rate of the total population at about 24.5% (figure of 1982), Nepal has still a long way to go towards achieving universal literacy. The proportion of illiterate population is extremely large in the remote districts, the disadvantaged groups and

the female population. Any literacy program to be launched in Nepal has therefore to take these factors into consideration.

In view of the fact that the major needs of the rural communities in Nepal consist in increasing agricultural production, improving the sanitary condition of the locality, reforming the old fashioned traditions, and above all, improving the living standard of the rural populace, the adult education programs have many crucial roles to play. First and foremost, creating sense of awareness and self-confidence among the rural populace in the fact that they could improve their condition is of prime importance. Secondly, providing them with one or more productive skills is also equally important. Lastly, but not the least importance, motivating and enabling them to participate in rural development activities is also necessary in that it facilitates the realization of the developmental goals of the country.

2. Literacy as a Component of the Rapti IRP Project:

The Rapti Zone is one of the remote and under-developed zones of the Kingdom. Keeping in view the urgent need for providing basic services to the rural population, particularly the disadvantaged people of the remote areas, His Majesty's Government has initiated Integrated Development Projects in the country. These projects are aimed at improving the over-all condition and life standards of the rural community by means of programs geared toward increasing agricultural production, improving health condition and ecology, enhancing productive skills, and generating employment opportunities. Considering the very low economic status of the people, the lack of basic facilities in the districts and the problems of many other kinds gripping all the five districts of the Rapti Zone, the Rapti Integrated Rural Development Project (RIEDP) has been initiated.

The Rapti IRDP was started on 12 August 1981. The major components included in the project were agriculture, irrigation, forestry, road construction, cottage industry and education. It is significant that education has also been considered as an integral component of the integrated development project. Considering that education plays a major role in producing required manpower from the population of the same region and in stimulating as well as in effecting meaningful participation of rural adults in IRD activities, it is quite natural as well as logical for the Rapti IRD to support various educational programs. The need for such support becomes more obvious as we take a glance at the educational status of the Rapti zone.

Two indicators that are closely related to this study are literacy status and school enrollment ratio. The baseline survey of the Rapti zone conducted by APROSC (1980) revealed that the literacy percentage of the zone as a whole was 22.1% (male - 37.6% and female - 6.1%) which is slightly below (by about 2% the national average. However, there existed a difference of about 13.5% points in between the districts themselves within the Rapti zone, the highest being 26.5% in the Dang district and the lowest being 13.0% in the Bhumra district. The enrollment ratio in 1981 at primary school level (the number of students enrolled out of the total 6 - 10 years population) for the Rapti zone was 53.8% as against 65.4% for the nation as a whole. However, the most alarming thing is the high drop-out rate at the primary level and the low transition rate (about 9% of the enrolled in the primary schools) from the primary to the lower secondary school level. Given the low enrollment ratio and the low holding power of the schools, the literacy programs are likely to serve as a major force in providing educational opportunity for the rural population of the Rapti zone.

The education component of the Rapti IRD project in its initial two years of operation included the improvement of physical facilities of the schools, the training of 15% of teachers at the certificate level, the organization of workshops for 2600 teachers, the provision of scholarships for 8000 students and the organization of 500 adult education centers. These 500 centers were distributed at a rate of 50

centers per district a year with a target of making altogether 20,000 adults literate during a two year period.

3. Objectives of Literacy and Functional Adult Education Programs:

The major foci of literacy programs, as stated in the program booklet published by the Ministry of Education in 1982, are on creating awareness in the rural populace about their own personal welfare as well as the development of the nation, imparting literacy skills, instilling functional skills in the area of agriculture, health and cottage industry, and enabling them to participate effectively in village developmental activities. Specifically, the objectives of the literacy and the functional adult education programs are:-

- a. To impart reading and writing skills to the adults as well as to enable them to solve numerical problems of everyday life;
- b. To improve their productive skills by means of functional programs related to the major occupation of the adult participants;
- c. To make them aware of and responsive to the matters relating to personal hygiene, community health and village development activities;
- d. To make them loyal to the King and the country; and
- e. To acquaint them with the problems and consequences of rapid population growth.

4. Facilities Provided for the Conduct of Literacy /AE Centers:

Two types of programs, namely, literacy and functional adult education, which are of 4 months' and 6 months' durations respectively,

are conducted in the Rapti zone. Once the quota of literacy centers for each district is fixed by the Ministry of Education, the establishment of a literacy or AE center is decided by the District Education Office in consultation with the local panchayats, the community workers and the adult participants themselves. The following facilities are provided for the conduct of adult education classes.

<u>Items</u>	<u>Literacy Center (4 months)</u>	<u>Functional AE Center (6 months)</u>
1. Remuneration for AE teacher @ Rs. 100/mo.	Rs. 400/-	Rs. 600/-
2. Remuneration for experts in Agri., health, etc. @ Rs. 15/- per class	-	Rs. 300/-
3. Logistics including kerosene, stationary @ Rs. 100/mo.	Rs. 400/-	Rs. 600/-
4. Primers, arithmetic book	-	-
5. Topical booklets on functional aspects of agriculture and health.	-	-

In addition, before the operation of literacy classes the teachers are provided with an orientation program of about 3-7 days which included the basis of conducting a literacy /AE center.

5. Management and Supervision of Literacy Programs:

The Ministry of Education is responsible for organizing and supervising adult education program throughout the Kingdom. It decides upon the number of centers to be established in a district in a given

year. After fixing a quota of literacy /AE centers for a district, all the responsibilities relating to the management of the literacy /AE centers are entrusted to the District Education Office. The location of a literacy /AE center is determined by DEO office and usually, a local teacher is recruited to serve as an adult educator to manage that center.

The literacy classes are usually conducted in school rooms and only occasionally in the panchayat building or in some other vacant place according to the convenience of the adult participants. Classes are run in the evenings for a period of two hours a day. In the first two months of the program, all emphases are placed on reading, writing and arithmetic. From the third month, information about agriculture, health and family planning is also integrated with literacy. In the case of functional AE classes, local experts on agriculture and health (such as Junior Technicians or Junior Technical Assistants or agriculture teacher or leader farmer in the case of agriculture and auxiliary health worker in the case of health) are invited to make presentations and demonstrations on relevant topics.

Previously, the Ministry of Education used to send AE supervisors for monitoring the progress of literacy /AE centers in the district. Currently, the responsibility of supervising literacy/ AE classes has also been shifted to the District Education Office. Presumably, the primary school supervisor will undertake this new assignment.

The management and supervision of the literacy /AE centers in the five districts of the Rapti zone follow the same mechanism described above. Apparently, there exists no special mechanism nor any designated personnel to ensure integration of AE programs with IKD project activities as well as to ensure adequate implementation of literacy /AE programs.

Chapter II

PROCEDURES OF THE STUDY

1. Objectives of the Study:

The major focus of this evaluative study was on determining the literacy achievement status of the adult participants of the literacy and the functional adult education programs as well as on assessing the benefits of these programs to the individuals and to the rural developmental activities of the related communities. Specifically, the objectives set forth for this study were:-

- a. To assess the effectiveness of the literacy and adult education programs in the Rapti zone vis-a-vis their stated objectives,
- b. To identify problems and prospects with respect to the quality and impact of these adult education programs as felt by the related personnel and participants at the central, district and field levels,
- c. To determine the extent of relationship of these educational programs with other Rapti IRD Project activities, and
- d. To recommend ways and means of improving the efficiency and effectiveness level of adult education programs and of maintaining better linkage with other IRD activities.

2. Study Sample:

The population for this study constituted adult participants in two types of literacy programs conducted in five districts of the Rapti zone for a period of two years starting in 1981. The sample selected for study included 622 participants who participated in one of the literacy programs in their respective districts. The locations of AE centers contacted in the study are shown in figure 2.1 and the details of the study sample are indicated in Table 2.1.

RUKUM

- 1 & 2. Ratamota
3. Thara Dhunge
4. Shankh
5. Kalledeo
6. Sanchaur
7. Hansibang
8. Simli
9. Pijayashwari
10. Nakhira

ROLPA

1. Thalawang
- 2 & 3. Sallibot
4. Reugha
5. Thaliwang
6. Bajawang

SALLYAN

SALLYAN

1. Bhotechaur
2. Faiyakharka
3. Kheirabang
4. Kumalgaon
5. Madankanda
6. Kauchhe
7. Dhandakateri
8. Cairabet
9. Golakpur

DANG

DANG

- | | |
|--------------|-------------|
| 1. Dhaireni | 6. Nimuriya |
| 2. Bharatpur | 7. Bangaln |
| 3. Jhingaura | 8. Pipri |
| 4. Karasar | 9. Sisanla |
| 5. Parsa | |

ROLPA

PYUTHAN

PYUTHAN

1. Sari
2. & 3. Bhiagri
4. Dhakwadi
- 5 & 6. Khalanga
7. Nayagaon
8. Markawang



Fig. 2.1. AE Centers contacted in the study

Table 2.1: Details of the sample selected for study by district, by type of the program and by year.

Type District	Literary				Functional AE			
	Total Centre	Study Centre	Sample Participants	Test Sample	Total Centre	Study Centre	Sample Participants	Test Sample
<u>RUKUM</u>								
1981/82	36	5	173	69	-	-	-	-
1982/83	43	5	219	74	3	-	-	-
<u>ROLPA</u>								
1981/82	21	2	68	23	9	-	-	-
1982/83	31	3	104	25	11	1	28	11
<u>SALLYAN</u>								
1981/82	21	2	44	29	10	2	63	32
1982/83	35	3	60	31	11	2	106	51
<u>PYUTHAN</u>								
1981/82	15	2	43	22	10	1	20	10
1982/83	37	2	87	38	13	3	115	54
<u>DANG</u>								
1981/82	46	4	237	69	-	-	-	-
1982/83	37	2	97	32	13	3	152	52
TOTAL	322	30	1132	412	80	12	484	210

Source: Related District Education Offices, Rapti Zone.

Ten percent of the total AE centers conducted in five districts of the Rapti zone were contacted during this study. Six hundred and twenty-two adult participants, i.e. about thirty-nine percent of the total participants in the sampled centers took the literacy test specifically designed for this study. Of the total adults participating in this study, 68% were male and 32% were female participants. Most of the adults mentioned agriculture as their main occupation. Only three percent of the adult participants stated business as their occupation. The age of adult participants ranged from 10 to 65 years with an average age of 22 years and a standard deviation of 9.6 years.

The details of ethnic background of the adult participants is shown in Table 2.2.

It is significant to note that about thirty-eight percent of the total participants belonged to the Chhetri ethnic group. In general, the predominant participation of three ethnic groups (i.e., Brahman, Chhetri and Newar) was apparent in four districts whereas in the remaining fifth district, Dang, the literacy classes were attended mostly by Tharus.

Table 2.2: Ethnic background of the adult participants

District	Ethnic Group						Total	
	Brahman	Chhetri	Newar	Matwali*	Occupation- al	Tharu		Others**
RUKUM	9	69	-	20	19	-	26	143
ROLPA	1	33	11	-	1	-	13	59
SALLYAN	7	81	-	17	10	-	28	143
PYUTHAN	29	46	29	1	3	-	16	124
DANG	-	7	1	6	3	117	19	153
TOTAL	46	236	41	44	36	117	102	622

* Gurung, Magar, etc.

** Nepali, Giri, Yogi, Dhimi, Mahara, Chalaune, Daraundi, etc.

In order to solicit opinions, reactions and suggestions about the AE programs, related personnel both at the central and field levels were interviewed. The details of the interview sample are shown in Table 2.3.

Table 2.3 Details of interview sample

Interview Sample District	Adult Participants	AE Teachers	Community Leaders	District Education Officer
1. Rukum	60	9	20	1
2. Rolpa	25	6	12	1
3. Sullyan	60	8	18	1
4. Pyuthan	51	8	12	1
5. Dang	57	9	17	1
Total	253	40	79	5

Two hundred fiftythree adults, i.e. forty percent of the total adults who took the literacy test, and all AE teachers of these centers contacted in the study were personally interviewed and their opinions and reactions about the literacy programs collected. Interviews were also taken with seventy-nine community leaders (such as chairmen of village panchayats and social workers) to solicit their comments on the relevance and effectiveness of the program.

Additionally, the related officials of the Ministry of Education were also interviewed.

Table 2.4: Academic Qualifications and training status of AE teachers

District	Below S.I.C.		Academic Qualification								Number of Teachers receiving AE Training
	S.L.C.		Intermediate		Bachelor		Master				
	M	F	M	F	M	F	M	F	M	F	
RUKUM	4	1	4	-	-	-	-	-	-	-	9
ROLPA	5	1	-	-	-	-	-	-	-	-	-
SALLYAN	3	1	2	-	2	-	-	-	-	-	2
PYUTHAN	-	-	2	-	3	1	1	-	1	-	-
DANG	3	2	3	1	-	-	-	-	-	-	7

NOTE: In the case of the Rukum district the same teacher has been involved in the two AE centers. One AE teacher of the Sallyan district conducted in Ratamata Village could not be contacted as he was out of station during the time of the survey.

The above table reveals that the Pyuthan district had better qualified teachers than any of the remaining districts. Two districts Rukum and Dang had a higher proportion of trained teachers. The Rolpa district has a low percentage of qualified and untrained teachers.

3. Instruments Used in the Study:

The design of this study is concerned with related data collection from adult participants, selected community people, AE teachers, and district and central level education officers. The administration of the instruments to different constituencies is shown in Table 2.5.

Table 2.5
Design matrix showing study groups
and instruments used in the study.

Instruments \ Study Groups	MOE Official	DEO	AE Teachers	Adult Participants	Community People
Interview Schedule	x	x	x	x	x
Literacy Tests	-	-	-	x	-
Survey Form	-	x	-	-	-

A brief description of the instruments used in the study is given in the following paragraphs.

- (a) Interview Schedule: The interview schedule consisted of open-ended items focusing on such aspects as major expectations from the program, substantive areas, status of implementation, strengths

and limitations of the program, problems encountered and possibilities of future improvement. The schedule was adjusted according to the level of the respondents. Thus, separate interview schedules were prepared for different groups as indicated Table 2.5 selected for the study. The details are given in Appendix A.

- (b) Literacy Tests: Based on the AE curricula, primers and other related materials, a literacy test consisting of reading, writing and arithmetic sub-tests was prepared to assess the achievement status of the adult participants. Greater details about this test are shown below.

Table 2.6: Details of literacy test

Test	Number of Items	Estimated Time in minutes	Reliability
Reading	25	15	.81
Writing	40	35	.92
Arithmetic	35	25	.98
Total	100	75 min.	.98

The literacy test and questionnaires were pre-tested in Khadka Bhadrakali Village Panchayat about 7 Km. north west of Kathmandu. Minor modifications were made after this pre-test. In brief, the literacy test meets the technical Criteria of content validity and internal consistency. The full specimen of the literacy test is given in Appendix B.

- (c) Survey form: In order to collect district level education data, this survey form was prepared. The specific information collected includes district level data and information on literacy and the functional AE program. The details of the survey form are given in Appendix C.

4. Training of Field Staff and Collection of Data:

Before sending research staff out for data collection in the Rapti zone a weeklong orientation/training program was organized. The training program was designed to give orientation to the field staff with regard to the purpose of the study, and the techniques of administering the literacy test as well as of interviewing related personnel. A senior project staff accompanied the field personnel to Dang and assisted them in organizing and conducting field data collection.

The collection of data was started on 25 August 1983 and was completed on 21 September 1983. The data were collected simultaneously in all the five districts of the Rapti zone.

5. Coding of Data:

Except in two groups of items, (writing sentences and solving numerical problems) all the literacy test items were scored 1 for the correct response and 0 (zero) point for the wrong answer. In the case of writing sentences and solving practical problems in arithmetic, 2 points were given to the correct answer, 1 point for the partially correct and 0 point for the wrong response.

The responses to the interview schedule were coded by major aspects of the literacy programs explored under this study. In addition, the field researchers prepared a synthesis of their experiences and impressions from the field.

6. Analysis of Data:

The quantitative aspects of the data analysis focussed on comparing average achievement status of adult participants of different districts and of different programs with respect to the main elements of literacy. The qualitative data solicited through interview schedules and informal conversations were analyzed with particular reference to the relevance and impact of the AE programs, relationship of the literacy program with IRD activities, problems encountered during implementation and possibilities of improvement in the future.

Chapter III

PRESENTATION OF THE FINDINGS

The results of the analyses of data obtained from 622 adult participants and 124 related persons of the five districts of the Rapti zone with the use of literacy tests and interview schedules are presented in this chapter. For the sake of brevity, this chapter is organized under two main headings only - (i) quantitative analyses of the literacy achievement of the adult participants and (ii) qualitative assessment of the impact of the program.

A. QUANTITATIVE ANALYSES OF LITERACY STATUS

1. Targets vs. Achievement

The annual progress report of the Rapti IRD Project* reveals that during the initial two year period (1981/82 to 1982/83), 420 centers out of the planned 500 literacy /AE centers (84%) were conducted and a little more than twelve thousand adults out of targetted 20,000 adults (60%) were made literate. Specifically, in the FY 1982/83, two hundred and forty-two literacy /AE centers were organized and 6429 adults, excluding the figure for one district, were made literate.** The achievement for the year 1982/83 appeared to be more satisfactory than in the preceding year. However, in general, the establishment of literacy centers and the enrollment in them have remained below targets.

* Rapti Integrated Rural Development Project: Annual Progress Report for FY 1982/83, Tulsipur, Dang.

** Source: Ministry of Education, The figure for Rolpa is not available.

2. Literacy Status of Adult Participants:

In order to assess the literacy status of the participants in the literacy/AE programs, a literacy test consisting of 85 items and carrying 100 marks (Reading - 25, Writing - 40 and Arithmetic - 35 marks) was administered to 622 adults of the five districts of the Rapti zone who participated in these programs. The achievements of these adult participants, as revealed by the literacy test, in reading, writing and arithmetic separately and their literacy status as reflected in their total scores are described in this section.

a. Reading

A reading test consisting a ten words, 10 sentences and a short paragraph followed by 5 simple comprehension questions was administered to adult participants to assess their achievement in reading. All these items were written in big letters on reading cards and were presented individually to the adult participants. The scores obtained by 622 adults in different reading items by district, by the type of program and by year are shown in Table 3.1.

On an average, the adult participants were able to read correctly seven words out of the given ten and six sentences out of the given ten and answer half of the simple comprehension questions asked about a short paragraph. The average reading status of the adult participants as reflected by their reading score is sixty percent of the total sampled reading tests. In other words, they can read sixty percent of the reading materials that are representative of the literacy primer and simple pamphlets/booklets used in the literacy/AE program.

Table 3.1: Mean score and standard deviation of adult participants
in the reading test by district by type of program and by year

District	1981/83				1982/83			
	Reading				Reading			
Area	Word (K=10)	Sentence (K=10)	Comprehens. (K=5)	Total (K=25)	Word (K=10)	Sentence (K=10)	Comprehens. (K=5)	Total (K=25)
RUKUM								
Literacy	8.65 (1.74)	6.98 (3.05)	3.12 (1.11)	18.48 (4.74)	8.77 (1.69)	7.39 (2.41)	3.13 (1.09)	19.30 (4.09)
Functional	-	-	-	-	-	-	-	-
POLPA								
Literacy	4.65 (3.42)	4.17 (3.81)	0.96 (1.37)	9.78 (8.03)	5.76 (3.70)	4.60 (4.19)	1.56 (1.58)	11.96 (9.06)
Functional	-	-	-	-	7.00 (2.83)	5.91 (3.60)	2.18 (1.47)	15.09 (7.68)
SALLYAN								
Literacy	6.31 (3.34)	6.00 (3.47)	2.66 (2.09)	14.97 (8.40)	5.97 (3.16)	5.26 (3.70)	1.81 (1.82)	13.03 (8.11)
Functional	7.88 (2.67)	7.42 (3.01)	3.59 (1.39)	18.88 (6.21)	7.45 (2.91)	7.14 (3.21)	2.47 (1.88)	17.06 (7.14)
RYUTHAN								
Literacy	7.91 (2.19)	6.77 (3.23)	3.09 (1.16)	17.77 (6.01)	7.32 (2.41)	6.45 (3.05)	2.82 (1.33)	16.58 (6.03)
Functional	7.60 (1.43)	7.40 (2.20)	2.90 (1.04)	17.90 (4.48)	7.89 (2.31)	7.30 (3.36)	3.24 (1.55)	18.42 (7.02)
DANG								
Literacy	6.13 (2.96)	4.33 (4.15)	1.71 (2.37)	11.88 (8.20)	6.06 (3.50)	5.46 (4.62)	1.93 (2.13)	13.46 (10.10)
Functional	-	-	-	-	5.63 (3.25)	3.71 (4.11)	1.38 (1.88)	10.69 (8.71)
TOTAL								
Literacy	7.00 (3.00)	5.66 (3.60)	2.36 (1.94)	14.83 (7.77)	7.25 (2.06)	6.22 (3.57)	2.48 (1.69)	15.96 (7.64)
Functional	7.81 (2.44)	7.42 (2.84)	3.43 (1.35)	18.65 (5.86)	7.00 (3.00)	6.05 (3.92)	2.36 (1.91)	15.40 (8.32)

NOTE: Figures in parentheses indicate standard deviation.

The most difficult words for the neo-literate adults appeared to be complex and long words like पञ्चायत (Panchayat) and फलफूल (Phalful). So, whenever the adults encounter words made up of compound characters, they have difficulty in reading the words correctly and with understanding. Given the complexity of the Devnagari script, the adult participants would require a great deal of practice in recognizing complex letters in Nepali and pronouncing the words in which they appear.

A comparison of the performance of adult participants of the two types of programs in the reading test indicates that in general, the participants of the functional AE program performed better than those of the literacy program. This finding is in the expected direction. The longer duration of the functional AE program should also enhance, in addition to conveying functional messages and developing useful skills, the reading skills of adult participation. (However, there is one exception. The adult participants of the functional AE program in the Dang district performed lower than those of the literacy program. A significantly higher mean reading score of the Rukum sample pushed the average score of the literacy group slightly above that of the functional group for the year 1982/83.)

With the exception of the Salyan district and the literacy group of the Pyuthan district, the adult participants of the year 1982/83 scored a slightly higher reading score than those of the previous year (1981/82). This slightly better performance of the 1982/83 group may be explained in terms of the principle of recency, i.e., the more recently an adult has participated in a program the more he or she will remember.

A district-wise comparison of the reading achievements of the adult participants reveal that the adults of Rukum, Phuthan and Salyan districts achieved a significantly better reading status than those of the Rolpa and Dang districts. A part of these differences may be explained by sampling errors in the selection of centers and participants. However, it may be noted that the magnitude of some of these differences

in mean scores is too large to be explained by the sampling error only. Thus, some significant programmatic interventions or background characteristics of the adult participants might have caused these differences.

b. Writing:

In order to determine the achievement status of adult participants in the writing skill, a writing test consisting of ten pictures each with one object to be identified by name, ten action pictures each to be described in a written sentence, and a unit on free composition requiring short answers was administered to the adult participants. The mean scores obtained by adult participants in different parts of the writing test by district by the type of program and by year are shown in Table 3.2.

The adult participants could identify in writing nearly seven out of ten pictures presented to them. However, they achieved considerably less when they had to describe action pictures in written sentences. They were able to do so for less than half of the ten simple action pictures presented to them. They were least able to express themselves in the written form. When asked to write about ten sentences describing the problems faced by the village community, the adult participants could write, on an average, only about two sentences. Out of the total 1234 responses in the free composition category, 23% were either incomplete or not clearly expressed. On the whole, the newly literate adults could correctly solve about forty-three percent of the writing tasks presented to them.

When compared by type of the program, the adult participants of the functional AE program, in general, did considerably better in the writing test than those of the literacy program. (The case of the Dang district is an exception to this generalization.) However, it is noteworthy that the literacy group performed slightly better in identifying pictures in

Table 3.2: Mean score and standard deviation of adult participants in the writing test by district by type of program and by year.

Areas	1981/82				1982/83			
	WRITING				WRITING			
District	Word (K-10)	Sentence (K-20)	Expression (K-10)	Total (K-40)	Word (K-10)	Sentence (K-20)	Expression (K-10)	Total (K-40)
RUKUM								
Literacy	8.00 (2.02)	8.30 (6.81)	1.27 (2.17)	17.58 (9.06)	8.20 (1.88)	11.54 (9.85)	1.76 (2.94)	20.49 (8.96)
Functional	-	-	-	-	-	-	-	-
ROLPA								
Literacy	3.48 (2.50)	3.26 (4.74)	0.35 (1.00)	7.09 (7.38)	5.00 (4.13)	5.04 (5.30)	0.76 (1.39)	10.80 (10.08)
Functional	-	-	-	-	5.73 (2.63)	6.27 (5.91)	0.73 (1.48)	12.73 (8.97)
SALLYAN								
Literacy	5.52 (1.94)	7.97 (5.24)	2.21 (2.28)	16.03 (6.99)	4.32 (2.79)	6.84 (6.32)	1.42 (2.35)	12.58 (10.32)
Functional	6.06 (1.98)	11.47 (3.81)	2.28 (2.11)	19.81 (6.51)	4.82 (2.02)	9.12 (5.63)	2.55 (2.65)	16.43 (8.75)
PYUTHAN								
Literacy	8.36 (2.77)	11.00 (7.02)	3.64 (3.84)	23.0 (11.83)	7.66 (2.39)	11.29 (6.81)	2.37 (3.05)	21.31 (12.07)
Functional	8.40 (1.56)	16.00 (3.16)	4.30 (3.44)	28.70 (7.39)	8.09 (2.63)	13.76 (7.27)	5.48 (4.15)	27.33 (13.30)
DANG								
Literacy	6.86 (2.92)	6.05 (7.06)	1.63 (3.11)	14.69 (11.82)	5.68 (3.91)	6.81 (7.79)	1.34 (2.80)	13.84 (13.09)
Functional	-	-	-	-	5.23 (3.03)	3.78 (5.18)	0.11 (0.82)	9.13 (7.95)
TOTAL								
Literacy	6.84 (2.68)	7.26 (6.63)	1.66 (2.78)	15.85 (10.65)	6.69 (3.25)	9.19 (8.42)	1.63 (2.75)	17.14 (11.47)
Functional	6.62 (2.14)	12.55 (4.14)	2.76 (2.64)	21.93 (7.72)	6.06 (2.96)	8.77 (7.30)	2.62 (5.71)	17.43 (12.63)

NOTE: Figures in parentheses indicate standard deviation.

the writing test than the functional group. In free composition and in describing action pictures in written sentences, the adult participants of the functional AE program performed relatively better.

A comparison of adult participants' achievement status in writing by year indicates that the participants of FY 1982/83 achieved a higher mean score than those of FY 1981/82 in the case of Rukum and Rolpa districts whereas it was just the reverse in the case of Sallyan, Pyuthan and Dang districts. This pattern of performance is inconsistent with the findings on achievement status in reading.

In sum, the average score obtained by adult participants in the writing test is 17 out of 40 points which is about forty-three percent. Further, their ability to express in words was found to be very limited. In general, it may be inferred that only one out of the four newly literate adults is able to communicate with others in the written form. These findings suggest that the writing component of the literacy programs needs to be strengthened to a great extent.

c. Arithmetic:

The arithmetic test is composed of 12 items in number concept, 12 items in simple computation and 6 items in numerical problem-solving. The performance of adult participants in different parts of arithmetic test by district, by type of program and by year is shown in Table 3.3.

On the whole, the adult participants were able to solve fifty percent of the arithmetic problems presented to them. Out of the twelve items relating to number concepts (such as writing numeral figures to denote a given set of objects and writing figures for words), they were able to solve about sixty percent of the total items. In simple computations, the adult participants were able to solve a little more than six out of twelve items, four each in addition,

Table 3.3: Mean score and standard deviation of adult participants in the arithmetic test by district, by type of program and by year

Area	1981/82 Arithmetic				1982/83 Arithmetic			
	Number Concept (K=12)	Computa- tion (K=12)	Problems (K=11)	Total (K=39)	Number Concept (K=12)	Computa- tion (K=12)	Problems (K=11)	Total (K=35)
BURUM								
Literacy	7.26 (4.28)	7.05 (4.87)	4.00 (3.68)	17.93 (11.34)	9.22 (3.20)	8.33 (3.72)	5.39 (4.01)	23.10 (11.86)
Functional	-	-	-	-	-	-	-	-
BOLPA								
Literacy	4.65 (4.24)	3.60 (4.11)	1.26 (1.80)	9.52 (9.59)	5.44 (4.32)	4.48 (4.15)	1.44 (1.72)	11.36 (9.33)
Functional	-	-	-	-	6.27 (5.26)	4.36 (4.18)	2.27 (3.19)	12.91 (12.38)
SALLYAN								
Literacy	6.59 (4.46)	6.86 (4.50)	3.72 (3.75)	16.83 (11.48)	6.77 (4.16)	5.25 (5.11)	3.35 (3.96)	15.39 (12.16)
Functional	9.84 (3.07)	9.21 (3.43)	6.06 (3.00)	25.15 (8.52)	9.04 (3.45)	8.41 (3.62)	7.27 (4.47)	24.73 (10.58)
PYUTHAN								
Literacy	6.64 (4.51)	5.59 (4.58)	2.23 (3.49)	14.45 (11.15)	7.21 (3.80)	5.02 (4.19)	3.07 (3.21)	15.31 (9.97)
Functional	9.30 (3.69)	7.00 (4.82)	5.90 (5.16)	22.20 (12.49)	6.85 (3.86)	9.16 (4.03)	6.94 (4.02)	24.96 (11.04)
DANG								
Literacy	5.47 (3.88)	4.92 (5.15)	2.21 (3.60)	12.23 (10.97)	4.31 (4.83)	3.68 (5.07)	2.50 (3.69)	10.50 (13.11)
Functional	-	-	-	-	4.71 (3.50)	4.84 (3.44)	0.94 (1.86)	10.59 (7.53)
TOTAL								
Literacy	6.24 (4.35)	5.80 (4.93)	2.90 (3.63)	14.65 (11.44)	7.20 (4.31)	6.00 (4.71)	3.68 (3.86)	15.28 (12.67)
Functional	9.71 (3.24)	8.68 (4.06)	6.02 (3.63)	24.45 (9.70)	7.46 (4.22)	7.28 (4.29)	4.88 (4.62)	19.65 (12.08)

NOTE: Figures in parentheses indicate standard deviation.

subtraction and multiplication. As it might be expected, they were able to solve more computational problems on addition than on subtraction and multiplication. Their ability to solve numerical problems were found to be much lower than their computational skills. The adult participants were able to solve a little more than one out of three word problems relating to their daily life activities.

It was found that the participants of the functional AE program performed significantly better in all parts of the arithmetic test than the literacy group. However, this difference is not so wide for the year 1982/83 as it was for FY 1981/82.

With the exception of Sallyan and Dang districts the adult participants of the year 1982/83 performed better in the arithmetic test than those of the year 1981/82.

d. A Comparison of Achievements in Reading, Writing and Arithmetic:

Reading, writing and arithmetic are basic skills of literacy. The development of skills in one area facilitates the learning of skills in another area. For instance, the reading skill facilitates the understanding and solving of numerical problems. However, it may be noted that the learning of the reading skill is the prerequisite for learning the skills of writing and arithmetic, particularly solving numerical problems. It is also worth mentioning that the development of the writing skill requires a great deal of practice and continuous feedback. Thus, it is of interest to examine comparatively the achievements of adult participants in reading, writing and arithmetic.

A comparison of the adult participants' achievements in reading, writing and arithmetic by district is shown graphically in Fig. I and is also indicated in Table 3.4.

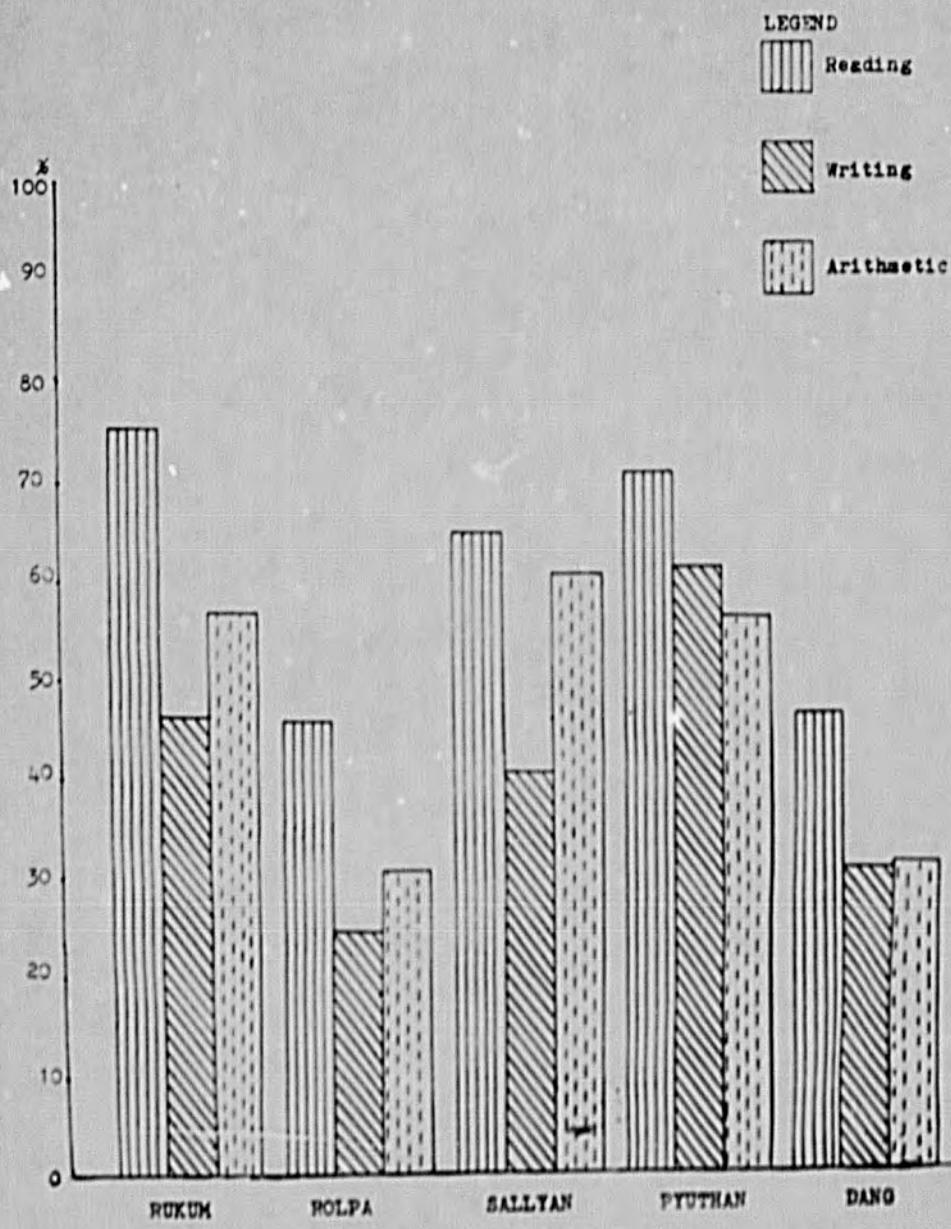


Fig. 3.1. Achievement in Reading, Writing and Arithmetic by District.

Table 3.4

Mean score and standard deviation of adult participants in reading, writing and arithmetic.

Area	Reading	Writing	Arithmetic
District	(Full Marks=25)	(Full Marks=40)	(Full Marks=35)
BUKUM (N=143)	M 18.94 (75.76) SD 4.43	19.09 (47.72) 9.12	20.60 (58.85) 13.40
ROLPA (N=59)	M 11.69 (46.75) SD 8.63	9.71 (24.27) 9.25	10.93 (31.22) 10.14
SALLYAN (N=143)	M 16.17 (64.68) SD 7.73	16.27 (40.67) 8.69	21.20 (60.57) 11.58
PYUTHAN (N=124)	M 17.70 (70.80) SD 6.42	24.03 (60.07) 12.62	19.91 (56.68) 11.89
DANG (N=153)	M 11.61 (47.24) SD 8.86	12.62 (31.55) 11.26	11.31 (32.31) 10.50
TOTAL (N=622)	M 15.63 (62.52) SD 7.83	17.19 (42.97) 11.43	17.40 (49.71) 12.54

NOTE: Figures in the parenthesis indicate percentages.

Table 3.4 reveals a pattern in which the adult participants achieved the highest status in reading, followed by arithmetic and writing. (The Pyuthan district is an exception to this.) In numerical terms, the average scores of the participants in these three basic areas of literacy - reading, writing, and arithmetic in percentages are 62, 42 and 50 percents respectively.

It is also noteworthy in Table 3.4 that the achievements of the participants of Rukum, Pyuthan and Salyan in reading, writing and arithmetic are remarkably better than those of the adults of Rolpa and Dand districts. In the absence of the process data on program operations, it is difficult to pin-point the causal factors precisely. However, it may be noted that a part of these differences occurred due to the selection bias as for example in Rukum, owing to bad weather only those centers enroute from the airport at Chaurjhari to Musikot were contacted during the study), teacher effects (e.g. Pyuthan centers had better qualified teachers than other districts) and socio-economic background of the adult participants (e.g. some centers have been predominately attended by adults of disadvantaged groups).

We get some interesting results when we compare adult participants' achievements in reading, writing and arithmetic by type of the program and by year. The related data are indicated in Table 3.5.

The adult participants of the functional AE program performed significantly better in all three areas than those of the literacy program for the year 1981/82, and in arithmetic only for the year 1982/83. When we compare the achievements by year, we find that the literacy group of the year 1982/83 performed slightly better than those of 1981/82 whereas the functional group of 1981/82 achieved significantly better than those of 1982/83.

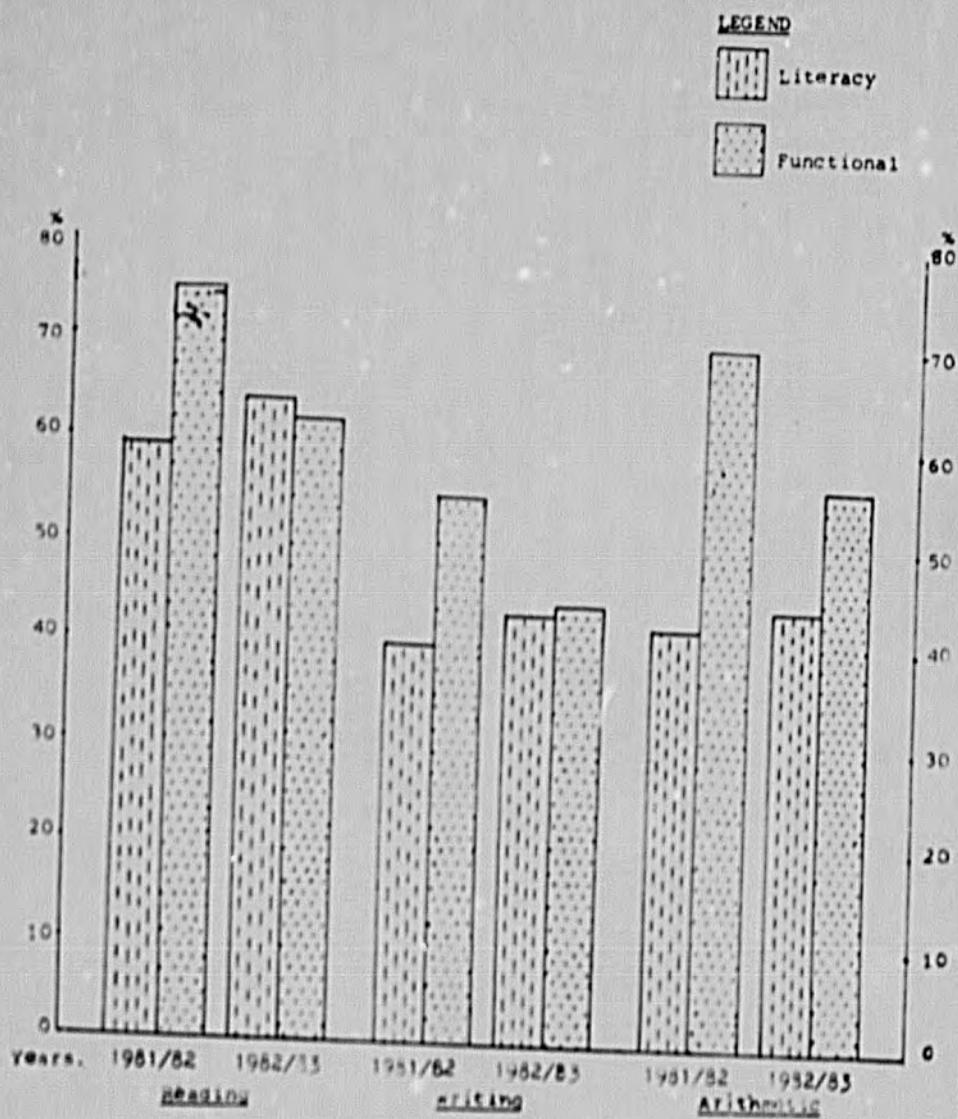


Fig. 3.2. A Comparison of Achievements in Reading, Writing and Arithmetic by type of the program.

Table 3.5: Comparison of achievements of adult participants in reading, writing and arithmetic.

Area	Year Program	1981/82		1982/83	
		Literacy	Functional	Literacy	Functional
1. <u>Reading</u>					
	FM	25	25	25	25
	Mean	14.83	18.65	15.96	15.40
	%	59	75	64	62
	SD	7.77	5.86	7.64	8.32
2. <u>Writing</u>					
	FM	40	40	40	40
	Mean	15.85	21.93	17.14	17.43
	%	40	55	43	44
	SD	10.65	7.72	11.47	12.63
3. <u>Arithmetic</u>					
	FM	35	35	35	35
	Mean	14.65	24.45	15.28	19.65
	"	42	70	44	56
	SD	11.44	9.70	12.67	12.08

It may be concluded from the above findings that the functional AE program is definitely better than the mere literacy program, simply because of the three months' additional class work. It also substantiates our contention that the learning of literacy skills would require a lot of practice, feedback and use of these skills over an extended time period. An extended time period is also essential, given the general inefficiency and unstimulating atmosphere found in adult education classes.

e. Literacy Status

An adult's literacy status as a result of his/her participation in literacy/AE program is indicated by his/her total score in the literacy test. For the sake of convenience, the literacy status is classified under three categories, viz, (a) Literate - those who score more than 60% in the literacy test and can reasonably be expected to use their literacy skills in everyday life under favourable conditions; (b) Partially Literate - those who score within a range of 21% - 60% of the literacy test and need considerable help in maintaining their literacy skills as well as in using them in their daily life activities; and (c) Illiterate - those who score 20% or below in the literacy test and cannot be expected to use their literacy skills in everyday life (or in - other words, they are like illiterates for all practical purposes or will soon ship back into illiteracy).

The literacy status of 622 adults of the five districts of the Rapti zone covered under this study is indicated in Table 3.6.

Of 622 adults who took the literacy test, about forty percent have achieved the literate status according to the classification of literacy status described above. On the other hand, about twenty percent of the adult participants were found to be near the illiterate status. The middle forty percent have scored within a range of 21% to 60%, indicating that these adults have difficulty in comprehending after reading, in expressing themselves clearly in the written form and in solving numerical problems. Thus, these adults can hardly be considered to have attained the literate status. So, logically, they have been described as "partially literate".

Table 3.6: Classification of adult participants with respect to their literacy status.

Categories & Score District Range	Illiterate (0 - 20)	Partially Literate (21 - 60)	Literate (61 - 99)	Total	Remarks
RUMUM	7 (4.90)	70 (48.95)	66 (46.15)	143	
ROLPA	26 (44.07)	32 (37.29)	11 (18.64)	59	
SALLYAN	24 (16.78)	44 (30.77)	75 (52.45)	143	
PYUTHIAN	12 (9.68)	44 (35.48)	68 (54.84)	124	
DANG	59 (38.56)	63 (41.18)	31 (20.26)	153	
TOTAL	128 (20.58)	243 (39.07)	251 (40.35)	622 (100.00)	

N.B. Figures in parentheses indicate percentages.

One major reason for a sizeable proportion (about 20%) of neo-literates tilting towards illiteracy is the fact that the adults were not tested at the end of the literacy program to determine the literacy skills they attained as a result of their participation in the program. A terminal literacy test or preferably a mid-term test would significantly increase the efficiency of literacy programs by means of providing additional help to the partially literate and near-illiterate adults to improve their literacy skills.

A comparison of the literacy status of adult participants by districts reveals that three districts - Rukum, Salyan and Pyuthan have a higher percentage of adults achieving the literate status than that of two remaining districts - Rolpa and Dang. Conversely, Rolpa and Dang have a higher proportion of adults in the illiterate status than the remaining three districts have. The difference between the districts with respect to the proportion of partially literate adults is not so wide as in other two categories of the literacy status.

In sum, it appears that the overall literacy status achieved by adult participants included in this study is below the expected level. Since literacy skills not adequately mastered by adults cannot be considered functional or practically useful, the achievement status of adult participants attaining the partially literate or illiterate status cannot be considered satisfactory. This finding points to the need for a mechanism to ensure effective teaching/learning process during the conduct of literacy/AE classes and also to ascertain the literacy skill attainment status of the adult participants at the end of the program.

3. Sex and Literacy Status:

An overall comparison of the literacy status by sex reveals interesting results. The details are shown in Table 3.7.

Table: 3.7 Comparison of literacy status between male and female participants.

Categories of Score Range Sex	Illiterate (0 - 20)	Partially Literate (21 - 60)	Literate (61 - 99)	Total
MALE	57 (13.97)	163 (39.95)	188 (46.08)	408
FEMALE	71 (33.18)	89 (37.38)	63 (29.44)	214
TOTAL	128 (20.58)	243 (39.07)	251 (40.35)	622 (100.00)

N.B. Figures in parentheses indicate percentage.

The distribution of male participants with respect to literacy categories appeared to be negatively skewed whereas that of female participants appeared to be platykurtic. In other words, a significantly higher proportion of male than of female adults achieved the literate status, according to our classification scheme. The achievement status of almost one third of the female participants was found to be at the illiterate status whereas less than one sixth of the male adults were found to be in that category.

The above finding is also substantiated by a comparison of mean scores of the male and female participants. The relevant statistics are shown in Table 3.4.

Table: 3.8 Means and standard deviations of male and female participants.

Sex	n	Mean	SD	t - value
Male	408	53.76	25.88	t = 4.72; p < .01
Female	214	42.54	30.74	

The difference between the mean achievement scores of the male and female participants in 11.22 points which is statistically significant at 1 percent level of confidence. The practical implication of this finding is that enquiries into the causes of low achievements by female participants should be explored so as to increase the efficiency of the literacy programs.

4. Age and Literacy Status:

The correlation between age and literacy achievement was found to be .15 which is significant at .01 level (df = 580; See Appendix D for details). Currently, about fourteen percent of the participants are under the age of fifteen (10-14 years). Considering the implication of this finding, it is advisable that enrollment in the literacy programs should be strictly restricted to adults of age bracket between 15 and 45, as specified in the program booklet.

B. QUALITATIVE ASSESSMENT OF THE PROGRAM

1. Functional Aspects of the Literacy Program:

The major expectations from a literacy/functional AE program are that the participating adults will be able to interact with the literate world and that they will be able to use newly acquired literacy and productive skills in improving their life conditions. Thus, the

proficiency level attained and the practical use of literacy and productive skills made are the major criteria for evaluating a literacy/functional AE program. Reactions and opinions solicited from adult participants and AE teachers are described in this section.

a. Use of Literacy Skills

A majority of adult participants who were contacted for interview indicated that they have used, to an extent, their writing skill in writing their signatures and in writing letters to their relatives. They also remarked that they could not improve their reading skills due to the lack of reading materials in the village. However, on the basis of the achievement data in the writing section of the literacy test, it may be noted that the adult participants would have great difficulty in communicating in the written form.

b. Information and Productive Skills

It was learnt from adult participants that all of them, regardless of the type of literacy program, were exposed to information about agriculture, health and family planning. The only difference between the literacy and the functional AE programs with respect to the dissemination of information about agriculture and health was that in the former program various pamphlets such as on communicable diseases, fishery and compost manure containing 19, 17 and 22 pages respectively were distributed by AE teachers whereas in the latter, information on these matters was presented by resource persons (JTA and health worker) who were available in the local community. The resource person was paid an honorarium of Rs. 15 per presentation.

The participants of the literacy program expressed the opinion that the functional knowledge and skills relating to the improved methods of agriculture, health, and sanitation should be made an integral part of their program.

On the other hand, the participants of the functional AE program remarked that the information on agriculture and health were given to them only in a theoretical manner. Demonstrations and practice sessions so necessary for the development of productive skills were lacking. The participants wanted that they should be provided with practical experience in these areas. For this purpose, they also suggested that the duration of the program should be appropriately extended.

A majority of AE teachers also felt that they should be given specific training in one or more areas of productive skills so that they themselves would be able to handle the component of the functional skills of the literacy program. This request is an indirect reflection of a lack of satisfactory collaboration with resource persons. The reports submitted by the field staff indicate that in the case of distant locations and during evenings, JTA's and health assistants found it inconvenient to actively participate in the functional AE classes.

Some major shortcomings in the literacy/ AE programs that have adversely affected the development of functional skills are mentioned below.

- a. Lack of proper materials for the adult participants to practice their writing skill has hindered their attainment of proficiency in written expression.
- b. An absence of follow-up reading materials has hindered the adult participants from maintaining the acquired level of skill in reading and/or from improving the skill.
- c. Information on agriculture and health is not provided in a practical manner.
- d. The duration of the program is not long enough to provide to the adult participants enough practice in productive skills.

- e. The functional AE program has not been linked with the on-going developmental activities.
- f. Important local crafts like weaving, metal, work, leather work, and processing of 'chiuree ghiu' have not been incorporated in the functional AE program.
- g. Specific inputs required to make the functional components of the program really practical and useful have been found to be inadequate, and a mechanism particularly to link AE activities with the extension activities is almost non-existent.

2. Relevance and Effectiveness of the Program

The District Education Officers (DEO) of five districts of the Rapti zone were interviewed in matters relating to relevance and effectiveness of the adult education programme. Five of them expressed that the adult education programme was relevant to the needs of the adult participants. They also responded that subjects, such as cottage industries, home economics, etc. should be added to the programme in order to make it more relevant. They opined that instructional approaches should be geared to the practical aspect of the day-to-day problems in life so that the adult participants would be able to tackle their problems in a better manner. This will make the programme more relevant to the real situation. Further, they suggested that follow-up activities and materials be provided to the adult participants which would not only make AE programme relevant to their needs but also retain the skills learned by them.

Regarding the effectiveness of the AE program, the DEO's said that the local people were quite enthusiastic about the operation of the AE program in their villages and the literacy aspect of the programme helped them learn to read and write. They also observed that participants were more interested in sending their children to school. Moreover, the

demand for AE centres was growing day by day in villages where there were no such centres. As such, it indicates that the behaviors of the participants are changing as a result of the AE program. On the other hand, one of the DEO's expressed the view that the program was not at all effective in producing the desired results because most of the AE centres were not operated as planned on account of meagre facilities, poor supervision and unfavorable local factors. Thus, due consideration should be given to the effective implementation of the AE program in order to bring out the desired effects.

A majority of the teachers held the view that the components of the AE program were relevant to the needs of the adult participants. However, they felt that they were not able to fulfil the expectation of the participants in making the program more practical and immediately useful. Since most of the participants were interested in agriculture, they were willing to learn new techniques of farming. As such, the practical aspects of the AE program should be stressed during the implementation of the program in order to make it more relevant to the needs of the participants. So far as the literacy aspect of the program is concerned, all the teachers were unanimous in their opinion that it was quite enough to impart to them the literacy skills.

Most of the teachers observed that the adult participants make a point of reading and writing their names things as well as other simple things after completing the AE program. As a result of this, they admitted that the percentage of literacy increased in their villages. Further, many participants were sending their children to school. They expressed the view that consciousness about health habits, cleanliness and new techniques of agriculture and awareness of the population growth have increased among the adult participants. They also observed that most of the participants have begun to live in clean surroundings, use improved seeds and apply new techniques of farming. Even some of the participants took books with them when they went to the forest side for collecting firewoods and for grazing cattle. They also opined that being inspired

by the modernizing elements in the AE program, the participants showed greater eagerness to involve themselves in social and developmental activities, such as contributing towards the construction of school buildings, road construction, and cleaning drinking water. However, most of the teachers believed that the effectiveness of the AE program was offset to a great extent by the lack of appropriate instructional materials, knowledge of proper methods of teaching adults, and inadequate physical and lighting facilities to conduct adult classes. In general, it indicates that the AE program has influenced the general life pattern of the rural people. Further, it seems that proper instructional materials should be developed and teachers should be trained in developing and using necessary instructional materials and in devising the methods of teaching in order to enhance the effectiveness of the AE program.

An overwhelming majority of the community leaders of five districts unequivocally accepted the relevance of the literacy aspect of the AE program. Regarding the functional aspects of the program, they expressed the view that the theoretical aspects of it was quite relevant to the needs of the male participants rather than the female ones, who needed more information on and skills in home science. But they felt that the practical aspect of the functional subjects needed to be improved and stressed so that these components would be more relevant to the day-to-day problems of life. Consequently, it would enhance the relevance of the AE program.

Most of the community leaders firmly admitted that the AE program was effective in bringing about two distinct changes on adult participants. Firstly, a majority of the adult participants read letters, signed their names and solved some simple arithmetical problems. Secondly, they showed greater willingness to participate in developmental activities of their villages. Before joining the AE program, most of them were reluctant to participate in rural developmental activities. They also observed that some of the adult participants discussed with their

neighbours the importance of education and they took interest in sending their children to school. They expressed the view that most of the participants applied different techniques of farming, made compost fertilizers, and kept their surroundings clean in the manner they learned in the adult classes. As such, it seems that the AE program has been effective in creating awareness among the rural populace to the extent of participating in developmental activities as well as adopting new methods of agriculture and the rules of personal health and hygiene.

A majority of the adult participants strongly agreed that both the literacy aspect and the functional aspect of the AE program were relevant to their needs. However, they stated that a good knowledge of the functional subjects and different learning skills should be included in the program in order to make it more relevant to the rural situation.

With respect to the effectiveness of the AE program, most of the participants expressed the view that they used many of the concepts and ideas that had been learned in adult classes. A majority of the participants responded that they were still doing some reading and writing in their everyday life. Many participants expressed the view that they became quite aware of communicable diseases, clean health habits, population growth and improved methods of agriculture after completing the AE program. They firmly admitted that they were more inclined now than before to send their children to school. Apparently, it can be inferred that the AE program has a salutary effect on improving the life style of the rural populace.

In concluding this section, it may be noted that one can find a greater level of receptivity on the part of the rural community toward the literacy /AE program. These programs have certainly raised the level of awareness among the rural people. Even to be able to write one's signature gave a feeling of elation to the rural adults. The suggestions of the rural people with respect to the need for making literacy/AE programs more practice-oriented, for emphasizing adequate

practical experience in one or more productive skills in consonance with specific income-generating opportunity in the community, and for initiating follow-up activities deserve immediate attention and appropriate action.

3. Problems Encountered in the Implementation of the Program:

Some major problems relating to the operation of the literacy/AE program as expressed by related persons are briefly mentioned below.

a. Inconvenient Location of the Center

A majority of adult participants and community leaders responded that no comprehensive survey was made before selecting the location of a literacy/AE center. As a consequence, a number of the AE centers were inconveniently located for adult participants, resulting in irregularity in their participation.

b. Delayed Release of Funds

As indicated by the related authorities, funds are not released on time. On account of delayed release, the money allocated for a given fiscal year remains unused. This has adversely affected the program. In other words, the AE teachers and resource persons are not paid in time, and the stationary and other required materials could not be purchased, when necessary.

c. Late Supply of Literacy Primers

The AE teachers and adult participants unanimously expressed the view that the literacy primers and other books/pamphlets were not made available in time for starting the classes. Consequently, some of the centers had to be started as late as by a month. The late supply coupled with inadequate number of materials caused hindrance to the smooth implementation of the program.

d. Lack of Commitment on the Part of AE Teachers

The District Education Officers opined that the literacy programs could not produce the desired effects on amount of the lack of trained adult education teachers. The AE teachers themselves felt that they required training for a longer duration than the usual 3-7 days orientation program, specifically in the functional aspect of the program.

The District Education Officers, some participants and community leaders expressed the view that AE teachers were irregular in most of the centers and were not fully committed to the program on account of the low remuneration they were given. This less attractive incentive as well as inadequate training may be the cause of the low level of motivation and commitment on the part of AE teachers.

e. Inadequate Provision Facilities and Instructional Materials

The provision of Rs. 100/- per month for the purchase of kerosene and stationary was found to be inadequate by AE teachers and adult participants. Most of the centers run without adequate lighting facilities. Many participants reported that they did not have enough practice in writing for lack of exercise books. Further, they felt that the teaching/learning situation was dull and unimpressive for want of instructional materials.

f. Short Duration of the Training Program

The learning of literacy and productive skills requires practice as well as feedback for an extended period of time. The duration of the literacy and the functional AE program was found to be inadequate both by AE teachers and adult participants. Since adults would not have much time or a proper atmosphere at home to practice their literacy skills, the program duration needs to be adjusted to the level and pace of the participants.

g. Lack of Supervision

Since one supervisor was assigned to supervise all centers of one district, the DEO's and the community leaders expressed the views that some of the centers were left uncovered by the supervision system and the progress of the other centers was not regularly monitored. Currently, there exists no effective mechanism to ensure that the classes were run inadequate number and in an expected manner.

h. Inflexible Program Schedule

Since most of the centers were conducted in winter, a majority of the participants and community leaders expressed the view that this period was not suitable for the rural populace of that region because most of them had to go out of village in search of work during that time. So only a few illiterate males got an opportunity to participate in the AE program. On the other hand, female illiterates were quite busy in their domestic activities in the absence of their male members of the family. So, they were also reluctant to join adult classes during that period. They suggested that the suitable time to start the program would be after the sowing session which falls in the middle of August.

i. Inflexible Program

Since the same type of program and the same sets of materials were implemented, we cannot expect that it would be equally meaningful and interesting to all the participants of different regions of the country. Currently, the adaptation of the substantive contents and methods to the specific needs and interest of the adults appear to be lacking. The non-inclusion of specific crafts training relevant to a given locality may be cited as an additional example of the inflexibility of the functional AE program.

j. Lack of Mechanism to Ascertain Literacy Status and Skill Learning of Adult Participants

Lastly, a major shortcoming in the operation of the literacy/AE program is the lack of examination at the end of the program to determine the achievement status of adult participants. The provision of terminal assessment as well as the award of literacy certificates should prove to be a motivating factor for the participating adults.

4. Linkage of Literacy Program with IRD Activities

Although the literacy programs are considered a part of the Rapti IRD project, there have been no attempts made toward modifying the substantive contents and methodologies of the programs so as to integrate them with the major developmental activities of the community. Very little coordination and communication between the IRD office and the District Education Office have been found in increasing the relevance of the program to the IRD project activities. At present, there is virtually no linkage between the literacy program and IRD activities.

In general, the literacy programs have been successful to an extent in raising the awareness level of the rural populace as well as in disseminating some information on agriculture and health. However, this cannot be considered adequate. For optimal benefits to accrue from the literacy programs, some sort of linkage of the programs with income-generating activities within the IRD project activities is essential so as to enable the adult participants to gradually improve their living conditions as well as to effectively participate in other development activities in the community.

Chapter IV

SUMMARY OF MAJOR FINDINGS AND RECOMMENDATIONS

This evaluative study was undertaken to determine the literacy status of the adult participants of the literacy and the functional adult education program conducted in five districts of the Rapti zone and to examine the relationship of the literacy program with the IRD activities. Thirty literacy and twelve functional AE Centers which consisted of about ten percent of the total adult education centers conducted in the five districts of the Rapti zone were included in the study. A literacy test, specifically prepared for this study, was administered to six hundred and twenty-two participants who attended the literacy classes in these forty-two adult education centers. In addition, two hundred and fifty-three of these adult participants, forty AE teachers, seventy-nine community leaders, five district education officers, and related officials of the Ministry of Education were interviewed for their opinions on the relevance of the program, problems encountered during implementation, and benefits from the program to the participating individuals and the local community.

Summary of Major Findings

The major findings of this study are briefly mentioned below:

1. In quantitative terms, eighty percent of the planned AE centers were established during the two year period (1981/82 - 1982/83), and about sixty percent of the targetted number of adults participated in the literacy program.
2. Forty percent of the adult participants achieved the literate status, indicating that these adults were able to read, write and solve numerical problems in a satisfactory manner and that their proficiency level would enable them to use their literacy skills in their everyday

life. On the other hand, twenty percent of the adults were found to be near-illiterate status, which means that their literacy skills were at a non-functional level. The remaining forty percent of adults who are in the intermediate range of achievement status was categorized as partially literate since these adults would need considerable assistance in improving their literacy skills to a usable form.

3. The average status achieved by adult participants in reading, writing, and arithmetic is reflected respectively in the mean scores of 15.61 (62%) 17.10 (43%) and 17.40 (50%).
4. The adult participants of the functional AE program achieved, in general, higher mean scores in reading, writing and arithmetic than those of the literacy program.
5. The adult participants of the literacy program of the year 1982/83 performed better in the literacy test than those of the preceding year whereas the participants of the functional AE program of the year 1981/82 demonstrated a higher level of achievement than those of the following year 1982/83.
6. In general, the male participants achieved significantly better than the females.
7. A positive and significant correlation was found between the age of the participating adults and the literacy achievement.
8. The functional components of the literacy/AE program were found to be implemented on a theoretical manner and hence, less effective.

9. Productive skills as relevant to the local situation that have great potentiality for raising the income levels of the participating adults were not included in the functional AE program.
10. The major problems facing the literacy/AE programs were in the form of (i) inconvenient location of the AE Center, (ii) inconvenient timing of the program, (iii) inadequate training of teachers, (iv) inadequate provision of instructional materials, (v) delayed release of funds (vi) late supply of instructional materials, (vii) inflexible programming and above all, (viii) lack of a monitoring and evaluation mechanism.

In conclusion, it needs to be emphasized that the participating adults and the community leaders had shown greater receptivity and enthusiasm toward the program. In fact as they had held great expectations from the program, they were found to be rather disenchanted with the dull and theoretical nature of the literacy programs, and not happy at the inadequate provision of training in productive skills. As a matter of fact, the most visible shortcomings in the literacy programs are the lack of recreational component (i.e., conducting literacy classes in an interesting manner in the form of creative activities) and of linkage with income-generating activities. Although the literacy program is not a panacea for all, still there is much room in it, as indicated by the findings of this study, for improving its quality and relevance. It is also sad that no attempts have been made toward integrating the literacy program with the specific income-generating activities of the IRD project.

Recommendations

On the basis of the findings of the study and the opinions expressed by related constituencies, and the following suggestions are made toward increasing the relevance and effectiveness of the literacy program in the Rapti zone.

1. Concerted efforts should be made toward integrating the literacy program with skill training in at least one of the specific income-generating activities of the IRD project. For this, an effective communication and coordination between IRD office and the literacy program as well as an adequate support to the program including the provision of an adult educator is essential.
2. Considering the time span required for the development of literacy skills, the duration of the literacy program should be made at least six months.
3. Keeping in view the difference between the literacy and the functional group with respect to the attainment of literacy status, it is suggested that only the functional adult education program be conducted instead of the pure literacy program.
4. In order to raise the achievement status of the adults in reading, writing and arithmetic, sufficient instructional materials should be provided to the AE center either from the District Education Office or from the Adult Education Division of the Ministry of Education. Of particular importance is the development and distribution of more picturesque materials (such as thematic pictures and flip charts) and exercise books for writing.
5. In order to conduct the functional component of the AE program in a more practical and useful manner, adequate inputs should be provided for demonstration and practical sessions. There is also a need for monitoring the operation of this component of the program as well as for linking it with the on-going extension activities in the community.
6. A certain degree of flexibility is desirable both in the program contents and the timing of the program so as to make them relevant and convenient to the participants.

7. While it is expedient to have the primary school supervisors supervise the AE classes also, there is still a need for supervision, at least on a random basis, from the central level, in order to determine the status of the program implementation as well as to collect the process data for further improvement of the program.
8. In order to improve the effectiveness of the literacy program, there should be a provision for some basic research studies on the appropriateness of different methods of and materials for conducting literacy and skill training program. The AE teachers and supervisors should be adequately oriented with the use of these methods and materials.
9. To keep the literacy classes running at an optional level, it is important that adequate incentives, in the form of remuneration and recognition should be provided to the teachers and also that the local social workers and change agents should be involved in the program in one form or another. However feasible, local facilitators should also be called in to assist in the conduct of literacy classes.
10. It is strongly recommended that an achievement test, centrally designed, be administered to the participating adults so as to determine their literacy status and that these adults whose performance is of a satisfactory level be certified as literate.
11. It is essential that village reading centers be established at different points to ensure that the literacy skills acquired by the neo-literate adults do not get lost for lack of use.

12. Finally, considering the fact that the ultimate effect of the literacy program needs to be judged by its impact on the living condition of the participating adults, it is highly important that an adult's successful completion in the adult education program should lead to his participation in skill training in one of productive aspects of rural life.

Reference

1. Feasibility Study of Rapti Zone Integrated Rural Development
Project: AFROSC, Kathmandu, Vols. I-V, 1980.
2. Ministry of Education, Literacy and Non-formal Adult Education in Nepal (in Nepali). Ministry of Education, Kathmandu, 1979.
3. Rapti Integrated Rural Development Project: Annual Progress Report for Fiscal Year 1982/83. Tulsiapur, Dang.

APPENDIX 'A'

Form No. 1.

Questionnaire For District Education Office

1. Background Information:
Name :
Age :
Sex :
District :
2. Does the Adult Education Program, in your opinion, have any relevance to the daily life needs of the adults ?
3. What subjects and skills do you think could bring about change and improvement in the life style of the participants under this program ?
4. What kind of impact has the Adult Education Program had on the participant who have attended it ?

13. What are your suggestions to make this programme more effective and practical ?

14. What arrangement have you made to teach functional subjects ?

15. What kind of skills have the participants learned besides reading and writing ?

16. Have you observed any change or improvement among the adults after they have participated in this program ?

17. What effects are found made upon the village communities by this program ?

18. Which aspects of the program have the participants taken special interest in ?

11. What are your suggestions to make this program more effective and interesting ?

12. Do you still continue reading and writing ?

13. Have you used any things that have been learned under this program ?
 - (a).
 - (b).
 - (c).

14. Have you sent your children to school after completing this program ?

साक्षरता परीक्षा

नाम :-
ठेगाना :-
लिङ्ग :-
उमेर :-
पेशा :-

2080

पढाइ

(क) तल दिईएका शब्दहरु एक एक
उरेर पढनीसः

READ EACH OF THE FOLLOWING WORDS

¹ रस

² यज्ञ

³ ऊखु

⁴ फलफूल

⁵ बगैँचा

⁶ भयाल

⁷ अड्डा

⁸ पञ्चायत

⁹ साइलो

¹⁰ जन्मभूमि

ख) तल दिईएका वाक्यहरु एक एक
गरेर पढनीसः

१. यो सउटा केटो हो ।
२. करेसावारीमा साग लगाऊ ।
३. रुखमा चरा बसेको छ ।
४. यो पोखरीमा घेरै ज्यागुता छन् ।
५. लड्डू गुलियो हुन्छ ।
६. शङ्का गर्नु राम्रो वानी होईन ।
७. हामी देशमा पाँच विकास क्षेत्रहरु छन् ।
८. भारतमा सर्प लुकेको छ ।
९. हामी गाउँमा महिला संगठन छ ।
१०. गर्मीमा हिंडन गाहो हुन्छ ।

ग) तलका कुरा रामरी पढनीस र
सोधिसका प्रश्नको जवाफ दिनीसः

(READ THE PASSAGE CAREFULLY AND ANSWER THE QUESTIONS GIVEN BELOW IT.)

शङ्करमूल गाँउका कुमार वाजे अस्ति पल्ला गाँउमा
गएका थिए। उनले त्यस गाँउमा यसपाली एउटा
प्रौढ शिक्षा केन्द्र खोलेको देखे। केही दिन त्यही वसेर
उनले प्रौढ कक्षा चलाएको हेरे। त्यहाँ १४
वर्ष माथिका निरक्षर व्यक्तिहरू आएका
थिए। त्यहाँ प्रवेशिका, अङ्क गणित, कृषि, स्वा-
स्थ्य, गृह विज्ञान र अन्य धेरै विषयको पढाइ
भएको उनले देखे। पढाइ राम्रो थियो।

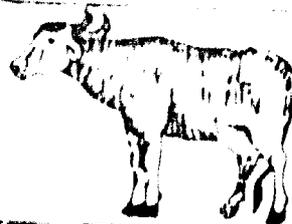
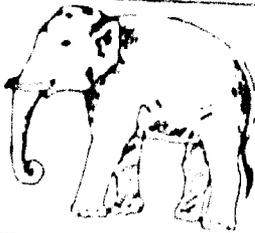
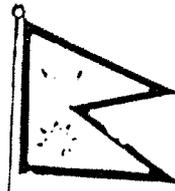
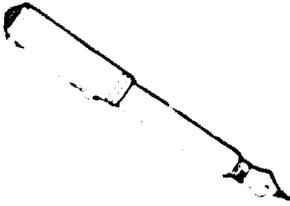
प्रश्नहरू :

- १) कुमार वाजेको घर कहाँ थियो?
- २) उनले पल्ला गाँउमा के देखे?
- ३) कृषि, स्वास्थ्य, गृहविज्ञान आदिको पढाइ कहाँ हुन्थ्यो?
- ४) प्रौढ कक्षामा कतिवर्ष माथिका मानिसहरू पढ्न आउँथ्ये?
- ५) प्रौढ कक्षाको पढाइ कस्तो थियो?

लेखाइ

क) तल दिइएका चित्रहरूको नाम खाली कोठामा लेख्नुोसः

उदाहरण—



8

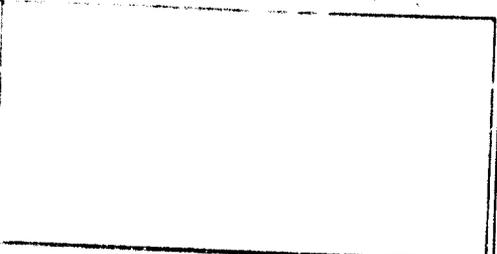


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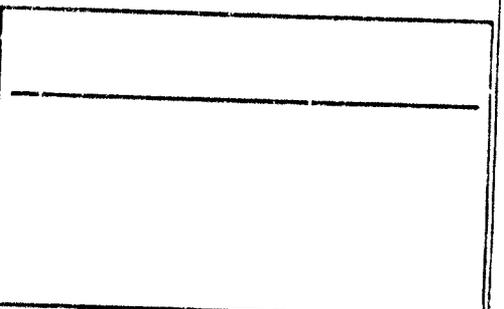


(ख) तलका चित्रहरु राखी हेर्नुभन्दा क भैरहेको छ
पुरा वाक्यमा खाली ठाउँमा लेख्नुोसः

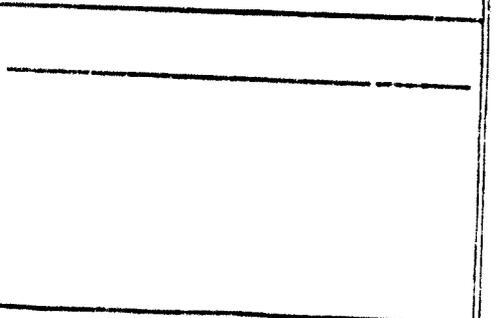
उदाहरण—
(EXAMPLE)



१.



२.



3



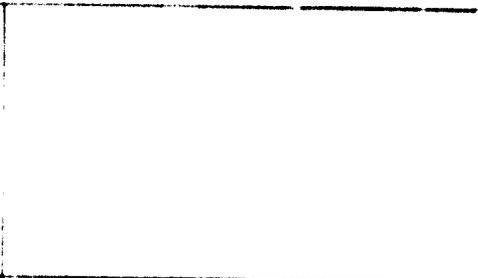








c



a



ज) तपाईंका जाडको मुख्य पीरमर्का वारे १० हरफ लेख्नुहोस्म

१

२

3.

8.

4.

3.

5.

2.

4.

90.

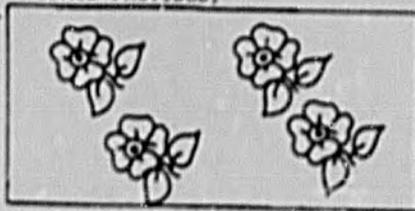
अङ्क गणना

१) तलका चित्रहरू गन्नुहोस र खाली कोठामा

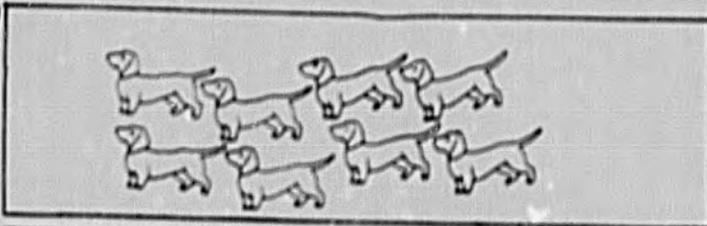
अङ्क लेख्नुहोस: (COUNT THE PICTURES GIVEN IN EACH BOX BELOW AND WRITE DOWN THE NUMBER IN FIGURES IN THE BLANK SPACE PROVIDED)

उदाहरण —

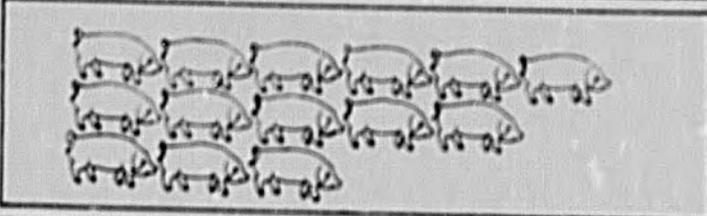
(EXAMPLE)



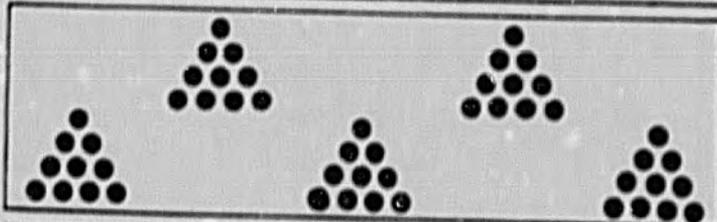
क



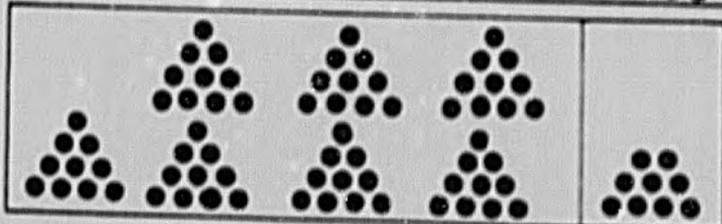
ख



ग



घ



② अक्षरमा लेख्नुहोसः
(WRITE IN WORDS)

उदाहरण—
(EXAMPLE)

८

क) २२

ख) ४५

ग) १११

घ) ८

③ अङ्कमा लेख्नुहोसः
(WRITE IN FIGURES)

उदाहरण—
(EXAMPLE)

पाँच

क) सत्र

ख) उनान्चालिस

ग) एकसठ्ठी

घ) तीन सय

④ जोड (ADD)

उदाहरण—
(EXAMPLE)

$$\begin{array}{r} 3 \\ + 2 \\ \hline 5 \end{array}$$

क)

$$\begin{array}{r} 4 \\ + 6 \\ \hline \end{array}$$

ख)

$$\begin{array}{r} 82 \\ + 24 \\ \hline \end{array}$$

ग)

$$\begin{array}{r} 64 \\ + 97 \\ \hline \end{array}$$

घ)

$$\begin{array}{r} 350 \\ + 823 \\ \hline \end{array}$$

(SUBTRACT)

घटाउः

उदाहरण—

(EXAMPLE)

$$\begin{array}{r} 8 \\ -2 \\ \hline 6 \end{array}$$

क)

$$7 - 5 = \square$$

ख)

$$\begin{array}{r} 66 \\ -98 \\ \hline \end{array}$$

ग)

$$\begin{array}{r} 67 \\ -25 \\ \hline \end{array}$$

घ)

$$\begin{array}{r} 634 \\ -520 \\ \hline \end{array}$$

(MULTIPLY)

गुणाः

उदाहरण—

(EXAMPLE)

$$\begin{array}{r} 92 \\ \times 2 \\ \hline 184 \end{array}$$

क)

$$8 \times 2 = \square$$

ख)

$$5 \times 6 = \square$$

ग)

$$\begin{array}{r} 23 \\ \times 2 \\ \hline \end{array}$$

घ)

$$\begin{array}{r} 75 \\ \times 2 \\ \hline \end{array}$$

ब) हिसाब गरेर देखाउनु होसः (SOLVE THESE PROBLEMS)

उदाहरण (EXAMPLE)

रामसंग ४ वटा आँप र उसको भाईसंग २ वटा छन् भने दुवैसंग गरेर कति आँप भए ?

$$\begin{array}{r} 4 \\ +2 \\ \hline 6 \end{array}$$

$$\text{अथवा } 4 + 2 = 6$$

क) कान्दाको जोठमा ७ वटा गाई र ६ वटा गोरु
द्वन् जम्मा कति गाई वस्तु भए ?

ख) साहिलाले यसपाली आलु बेचेर रु ४२ र गहुँ
बेचेर रु ८४ पाएछ भने उसंग जम्मा कति
रुपैया भयो होला ?

ग) काले मगरसंग १२ वटा कुरबुरा थियो / ७ वटा रामे-
लाई बेच्यो, अब उसंग कति बाँकी छ ?

घ) तपाईंले रवेतमा कामगर्न ३८ जना ज्यामीहरुलाई
लगाउनु भएको थियो / रवाजा खाई सकेपछि
१२ जना घर फर्केद्वन् भने अब कति बाँकी रहे ?

ङ) हरिले एकदिनमा २ रुपैया कमाउँछ भने ३ दिन-
मा कति रुपैया कमाउँछ ?

च) एक रोपनी रवेतमा देसीमल ४ बोरा लाग्छ भने
१० रोपनीमा कति बोरा मल चाहिएला ?

APPENDIX 'C'

DISTRICT DESCRIPTION

- (1) District (2) Main Occupation
- (3) Population (4) Transportation
- (5) Literacy 7
- (6) No. of Schools:
- I) Primary II) Lower Secondary III) Secondary IV) Campus
-
- (7) No. of Adult Education Classes:
- I) Literacy II) Functional III) Integrated
-
- (8) No. of Panchayats:
- I) Town Panchayat: II) Village Panchayat:
- (9) No. of Cottage Industries in the District:
- I)
- II)
- III)
- (10) On-going Development Programs in the District:
- I)
- II)
- III)
- (11) Implementation of Adult Education Program. (Process + Organization)
- (12) Effectiveness of the Program. (Management, Input, Output)
- (13) Impacts of the program on local people. (Attitude change, Habit, opinion etc.) Practice + Awareness.

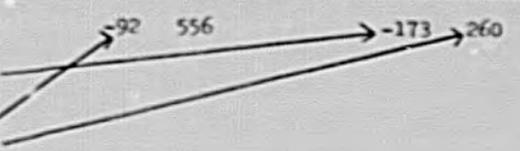
APPENDIX 'D'

Calculation of Correlation Coefficients between age and test scores of Adult Participants

Score

Age	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	f_y	y'	$f_y y'$	$f_y y'^2$	$\sum f_x y'$	$\sum f_x y'^2$	$\sum f_x y'$	$\sum f_x y'^2$
60-69				(-8)		0					2	4	8	32	8		-2	-8
50-59		(-12)	(-9)					(6)	(9)	(12)	7	3	21	63	33	33	0	0
40-49			(-8)	(-6)	(-4)	(-2)	0	(2)	4	(6)	26	2	52	104	32	60	-14	-28
30-39	(-5)	(-4)	(-3)	(-2)	(-1)	0	(1)	(2)	(3)	(4)	92	1	91	92	108	72	36	36
20-29	0	0	0	0	0	0	0	0	0	0	7	11	9	14	20	28	27	40
10-19	(5)	(4)	(3)	(2)	(1)	0	(-1)	(-2)	(-3)	(-4)	41	40	26	18	21	28	15	25
	205	160	78	36	21	0	-15	-50	-87	-88	265	-1	-265	265	500	240	-260	260

f_x	52	58	43	48	52	75	59	88	67	40 = 582
x'	-5	-4	-3	-2	-1	0	1	2	3	4
$f_x x'$	-260	-232	-129	-96	-52	0	59	176	201	160 = 173
$f_x x'^2$	1300	928	387	192	52	0	59	352	603	640 = 4513
$f_y y'$	-37	-28	-13	8	-7	-3	6	5	-9	-14 = -92
$\sum f_x y'$	185	112	39	-16	7	0	6	10	-27	-56 = 260



$$C_y = \frac{-92}{582} = 0.16$$

$$C^2_y = 0.0256$$

$$C_x = \frac{-173}{582} = -0.30$$

$$C^2_x = 0.09$$

$$r_y = \sqrt{\frac{556}{582}} - 0.0256 = 0.96$$

$$r_x = \sqrt{\frac{513}{582}} - 0.09 = 2.77$$

$$Y = \frac{260}{582} - (0.16)(-0.30)$$

$$= \frac{0.96 \times 2.77}{0.45 - 0.05}$$

$$= \frac{2.66}{0.40} = 0.15 \text{ p} < .01$$

(Table value $\gamma = .115$)

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