

Appendix 1: LITERACY IN ORISSA STATE AND IN COASTAL
VILLAGES OF THE STATE (1981 CENSUS)

Orissa State

Total population	:	26.4 million
		- 13.3 million males
		- 13.1 million females
Average literacy		34.23%
		(for males 47.10%
		for females 21.10%)
Ratio		220 literate males for every 100 literate females.

The tables below give literacy information for 20 sample villages from each of Orissa's four coastal districts.

The tables show that the lowest literacy among the sampled villages is in Ganjam district (17.9%), the highest in Balasore (35.7%). The ratio of literate females to literate males is highest in Cuttack (56%) and lowest in Ganjam (37%)

20 Sample Villages - Balasore District

Name of village	Population of the village	No of literates		Percentage of literates	
		Males	Females	Total	
1. Udaypur	488	91	25	116	23.8%
2. Teluni	207	48	15	63	30.3%
3. Bolong	2841	687	228	915	32.2%
4. Nagaleswar	1736	442	142	584	33.6%
5. Saudi Chak	1121	355	126	481	42.9%
6. Machhadiha	422	125	41	166	39.4%
7. Sankarpur	271	39	9	48	17.7%
8. Sundarkoili	386	57	19	76	19.7%
9. Nuagaon	1007	281	79	360	35.7%
10. Chasakhand	523	62	38	100	19.1%
11. Balaramgadi	28	5	5	10	35.7%
12. Parikhi	6454	1575	569	2144	33.2%
13. Talapada	2300	561	182	743	32.3%
14. Anantapur	3256	1041	504	1545	47.4%
15. Barajdeuli	364	125	55	180	49.4%
16. Nuapur	2078	531	178	709	34%
17. Pakhara	3293	865	446	1311	39.8%
18. Bishinupur	3114	987	488	1475	47.3%
19. Mulakaida	846	298	140	438	51.7%
20. Raghunathpur	821	226	131	397	48.3%
Average literacy percentage in the district					42.06%
Average literacy percentage in the sample villages					35.7%
Average ratio of literate females per 100 literate males					50

20 Sample Villages - Cuttack District

Name of village	Population of the village	No of literates		Percentage of literates	
		Males	Females	Total	
1. Rajnagar	2868	864	393	1257	43.8%
2. Satabhaya	903	180	65	247	27.3%
3. Talchua	515	177	72	249	48.3%
4. Jamboo	3327	678	257	935	28.1%
5. Mahakalpara	647	212	132	344	53.1%
6. Kharinasi	3460	741	250	991	28.6%
7. Harishpur					
Gara	2250	535	144	679	30.1%
8. Nuagan-					
Dhenkia	3405	1119	594	1713	50.3%
9. Nolia Sahi	362	100	27	127	35%
10. iatadhara					
Tanda	10	4	Nil	4	40%
11.Jatadhar		Uninhabited			
12.Barkuda	2	Nil	Nil	0	0%
13.Sahadabedi	789	278	67	345	43.7%
14. Kansanipatia		Uninhabited			
15.Abhay Chandpur		Uninhabited			
16.Godindapur	1744	448	241	689	39.5%
17.Bhuyanpal	6	2	Nil	2	33.3%
18.Kankana	837	263	93	356	42.5%
19.Kaudia	51	14	6	20	39.2%
20.Musadiha	85	13	3	16	18.8%
Average literacy percentage in the district				45.43%	
Average literacy percentage in the sample villages				35.4%	
Average ratio of literate females per 100 literate males				56	

20 Sample Villages - Pun District

Name of village	Population of the village	No of literates		Percentage of literates	
		Males	Females		Total
1. Sahana	570	164	56	220	38.6%
2. Konark	2425	632	318	950	39.1%
3. Gadabanger	9	6	Nil	6	66.6%
4. Noliapatna	77	8	2	10	13%
5. Udaygiri	380	120	36	156	41%
6. Baliapokhari	Uninhabited				
7. Biripadar	214	12	3	15	7%
8. Hunjan	57	2	Nil	2	3.5%
9. Morda	643	157	87	244	37.9%
10.Jamuna	339	84	20	104	30.7%
11.Brahmanandeo	585	163	37	200	34.22%
12.Godhanpara	37	12	5	17	45.9%
13.Sudhikishore	1015	269	117	386	38%
14. Chhuriana	1158	372	176	548	47.3%
15. Madhipur	517	196	126	322	62.3%
16.Khalakata	922	74	10	84	9.1%
17. Balukhanda	1852	450	153	603	32.5%
18.Mohinpur	80	23	3	26	32.6%
19. Batulibhuyan	19	5	5	10	52.6%
20.Kashi Haripur	372	37	6	43	11.6%

Average literacy percentage in the district 45.50%
 Average literacy percentage in the sample villages 35.01%
 Average ratio of literate females per 100 literate males 42

20 Sample Villages - Ganjam District

Name of village	Population of the village	No of literates		Percentage of literates	
		Males	Females	Total	
1. Venkat Raipur	2817	391	174	565	20%
2. Markandi	1708	124	39	163	9.5%
3. Sonapur	3367	700	178	878	26%
4. Patisonapur	1882	73	9	82	4.3%
5. Katturu	1619	190	27	217	13.4%
6. Gokkarkuda	673	157	67	224	33.2%
7. Kantiagara	1808	190	26	216	11.9%
8. Nua Golabandha	4821	671	322	993	20.6%
9. Hafipara	828	164	81	245	29.6%
10. Kirtipur	851	75	2	77	9%
11. Lodigam	426	62	14	76	17.8%
12. Baksipalli	2366	312	182	494	20.9%
13. Indrakshi	857	191	76	267	31.2%
14. Phasi Nuapur	276	27	1	28	10.1%
15. Dhepa Nuapur	400	30	2	32	8%
16. Ekasinghi	1498	142	25	167	11.1%
17. Chandanbara	986	34	6	40	4%
18. Kostapata	Uninhabited				
19. Basanaputti	447	79	31	110	24.6%
20. Upalaputi	1866	441	216	657	35.2%

Average literacy percentage in the district 31.3%

Average literacy percentage in the sample villages 17.9%

Average ratio of literate females per 100 literate males 37

Appendix 2: LIST OF 20 NEPE CENTRES OPENED IN DECEMBER 1983 AND ASSOCIATED FISHERIES EXTENSION CENTRES AND TEACHER TRAINING INSTITUTES

S.No.	District	Name of the village where the centre is located	Name of the concerned Fisheries Extension Centre	Name of the concerned Teachers Training Institute
1.	Balasore	Teluni	Baliapal	Secondary Training School Nagaleswar
2.	"	Saudi	"	
3.	"	Sunderkoili	"	
4.	"	Saudi Chaka		
5.	"	Sankerpur		
6.	"	Purusottampur	Gopalpur	Secondary Training School Bagudi
7.	"	Talpada		
8.	"	Barajdeuli		
9.	"	Raghunathpur		
10.	"	Avana		
11.	"	Nuapur		
12.	Cuttack	Sandhakud	Kujang	Secondary Training School Kujang
13.		Nolia Sahi		
14.	Pun	Chandrabhaga (Konarak)	Konarak	Secondary Training School Nimapara
15.	"	Penthakata	Pun	Secondary Training School (Women) Pun
16.		Balinulia Sahi		
17.	"	Gaurbara Sahi		
18.	Ganjam	Nulia Nuagaon	Ganjam	Secondary Training School (Women) Berhampur
19.	"	Nua Golabandha	Gopalpur on Sea	
20.	"	Bander Raikatur	"	"

	Distribution of CENTRES	FEOs, TTIs & FEDs	TEs (District-Wise) TTIs
BALASORE	11	2	2
CUTTACK	2	1	1
PURL	4	2	2
GANJAM	3	2	1
TOTAL	20	7	6

FED - Fisheries Extension Officer
 TTI - Teachers' Training Institute
 TE - Teacher - educator

Appendix 2 (contd)

LIST OF 20 NFPE CENTRES OPENED IN DECEMBER 1984, AND ASSOCIATED
FISHERIES EXTENSION CENTRES AND TEACHER TRAINING INSTITUTES

S.No.	Name of the District	Name of the Village where the Centre is located	Name of the concerned Fishery Extension Centre	Name of the concerned Teacher's Training Institute (S.T.S)
1	2	3	4	5
1.	Balasore	Udaypur	Chandaneswar	Secondary Training School, Langeswar
2.		Krushnanagar	"	
3.	"	Chhanua	Chhanua	STS (W), Basta
4.	"	Kasafal	"	
5.	"	Jagannathpur	Adhuan	STS, Bagudi
6.	"	Nuagaon		
7.	"	Dhanakuta	Dharma	STS, Pahimohura
8.	"	Pradyutnagar		
9.	Cuttack	Keragarh	Rajnagar	STS (8), Kendrapara
10.	"	Birabhanjapur		
11.	"	Kharanashi	Mahakalpara	
12.	Puri	Penthakata (N)	Puri	STS (8), Puri
13.	"	Sahana	Astarang	STS, Nimapara
14.	"	Anakana	"	
15.	"	Asijanga		
16.	Ganjam	Kantiagada	Ganjam	STS, Khallikote
17.	"	Gokhurkuda		
18.	"	Ramayapatna	Sonapur	STS, (8) Berhampur
19.	"	Katturu		
20.	"	Venkatraipur	Gopalpur on sea	

DISTRICT-WISE DISTRIBUTION OF NFPE CENTRES, FEOs AND TTs

	CENTRES	FEOs	TTs
BALASORE	19	4	4
CUTTACK	5		1
PURI	8	2	2
GANJAM	8	3	2



NFPE centres opened in December 1983

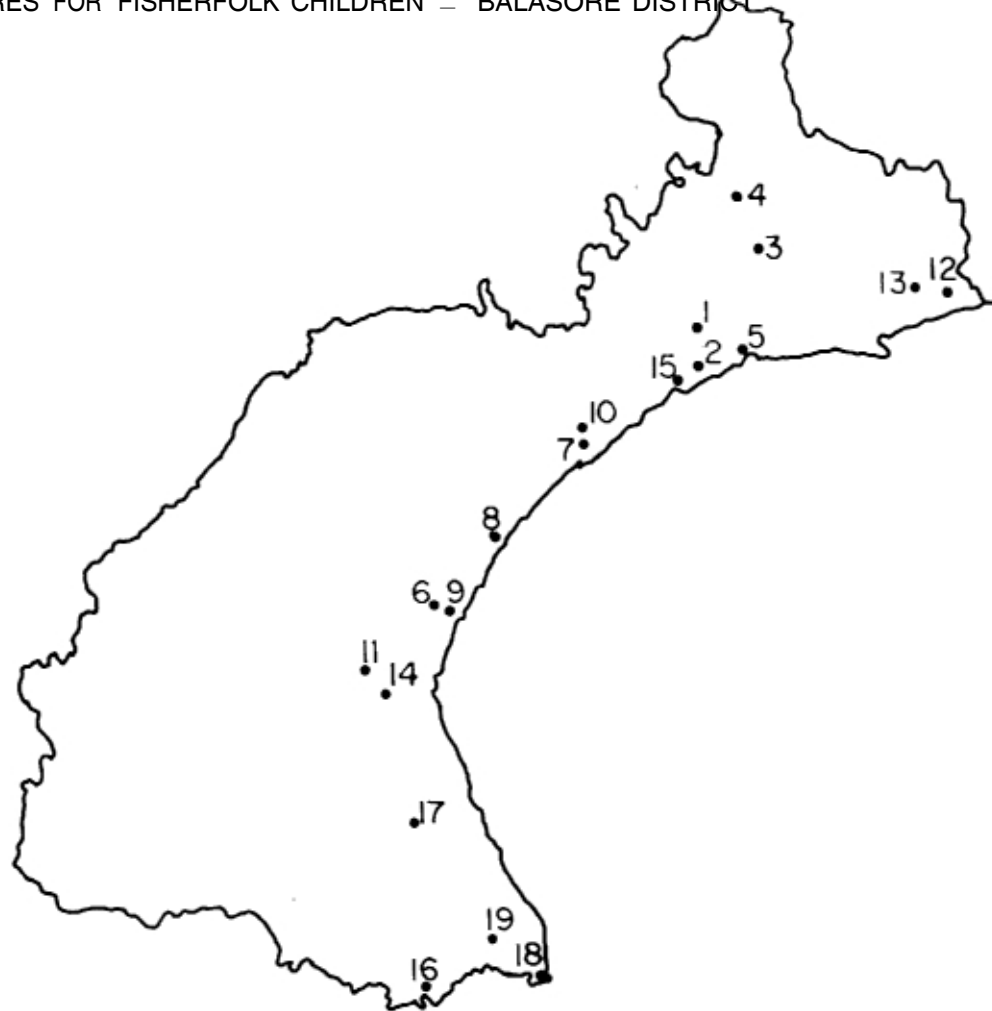
1. Teluni
2. Saudi
3. Saudi Chaka
4. Sankarpur
5. Sunderkoiti
6. Avana
7. Talapada
8. Nuapur
9. Barajdauli
10. Purusottampur
11. Raghunathpur

Centres opened in December 1984

12. Udaypur
13. Krushnanagar
14. Chhanua
15. Kasafal
16. Jagannathpur
17. Nuagaon
18. Dhanakuta
19. Pradyutnagar

Fisheries particulars: Balasore District

1. Coastline – 130 km
2. Total no of marine fishing villages = 150
3. Total no of marine fishermen's households = 9,260
4. No of active fishermen = 17,168





NFPE centres opened in December 1983

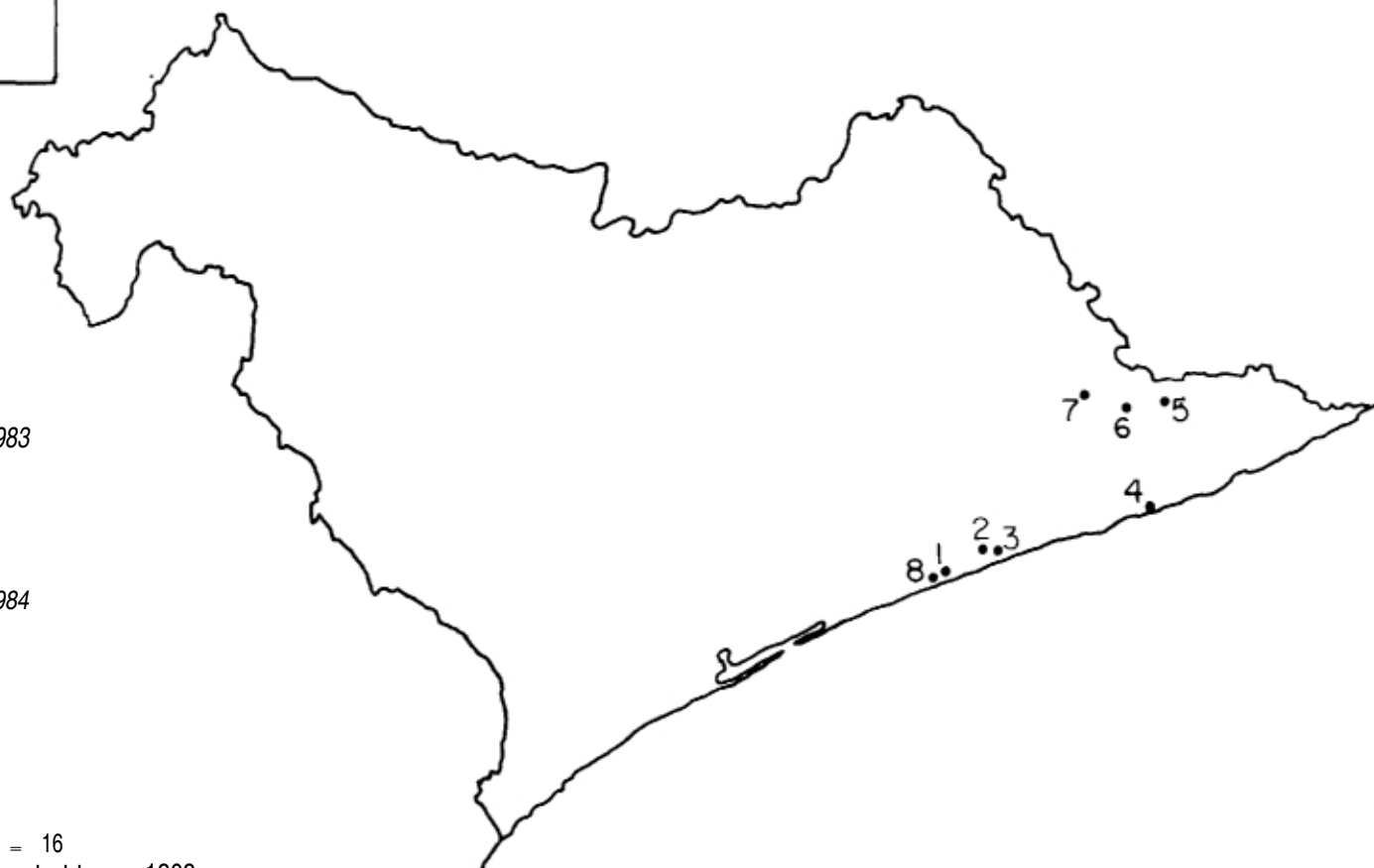
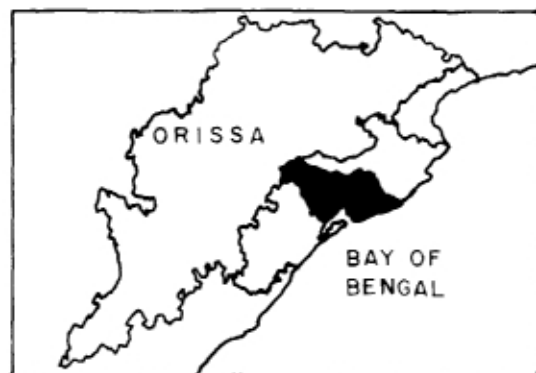
1. Sandhakud
2. Nolia Sahi (Gad Kujang)

NFPE centres opened in December 1984

3. Birabhanjapur
4. Keraragarh
5. Kharanashi

Fisheries particulars, Cuttack District

1. Coastline – 135 km.
2. Total no of marine fishing villages = 7
3. Total no. of marine fishermen's households
= 1,686
4. No. of active fishermen = 3,202



NFPE centres opened in December 1983

1. Penthakata
2. Balinolia Sahi
3. Gaurbara Sahi
4. Chandrabhaga (Konarak)

NFPE centres opened in December 1984

5. Sahana
6. Anakana
7. Asijanga
8. Penthakata

Fisheries particulars – Puri District

1. Coastline = 155 km.
2. Total no. of marine fishing villages = 16
3. Total no. of marine fishermen's households = 1808
4. No. of active fishermen = 3800



NFPE centres opened in December 1983

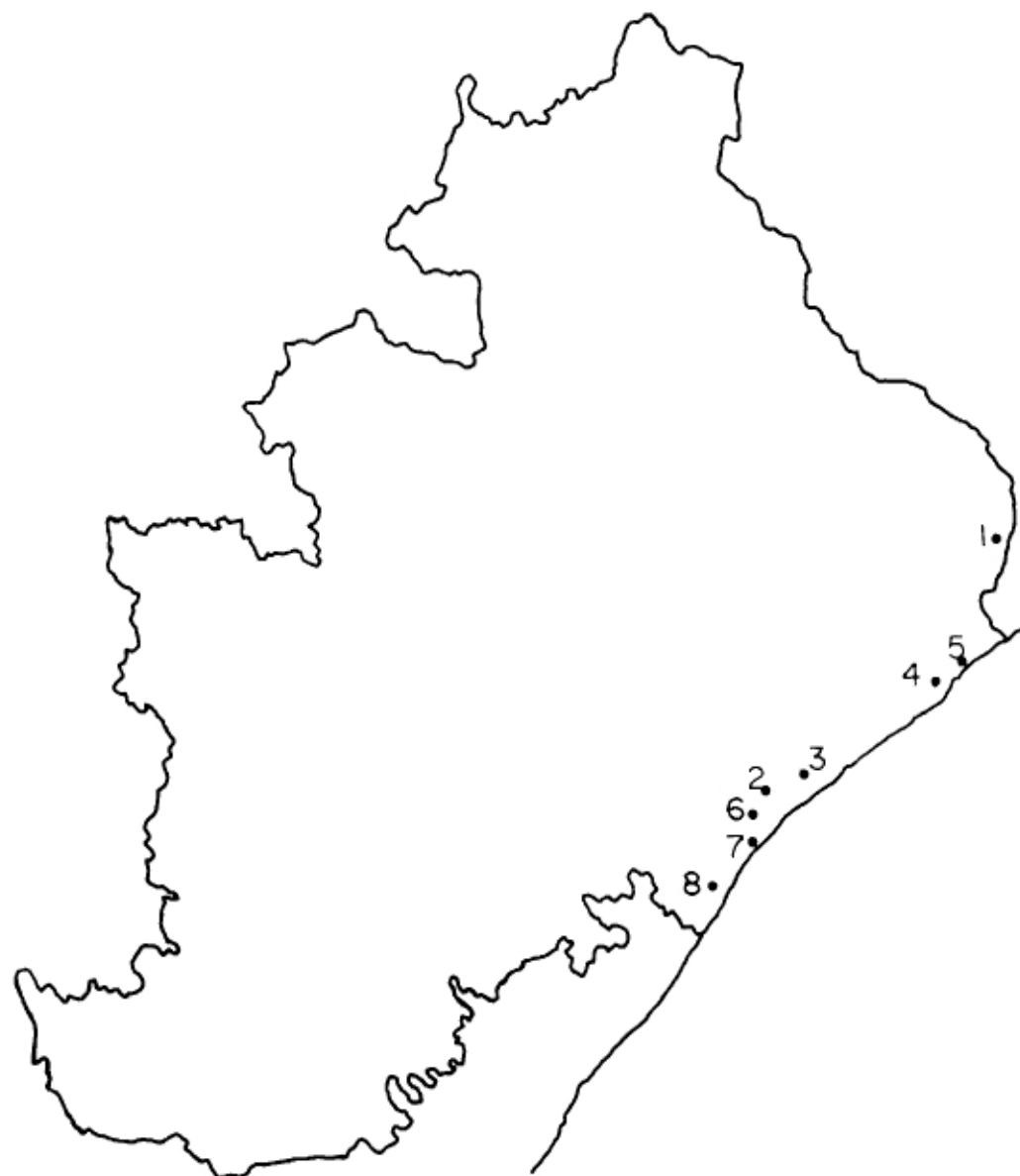
1. Nolia Nuagaon
2. Bander Raikatur (Near Gopālpur-on-Sea)
3. Nau Golbandha

NFPE centres opened in December 1984

4. Gokhurkuda
5. Kantiagada
6. Venkataipur
7. Ramayapatna
8. Katturu

Fisheries particulars : Ganjam District

1. Coastline — 60 km
2. Total no. of marine fishing villages — 29
3. Total no. of marine fishermen's households = 4132
4. No. of active fishermen = 5880



Appendix

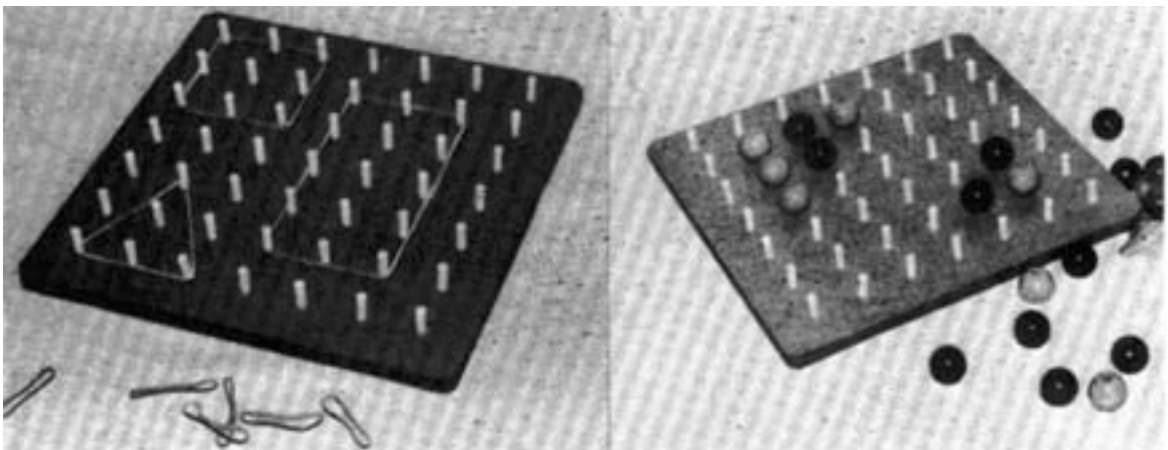
VISUAL TEACHING AIDS FOR PRIMARY SCHOOL CHILDREN

by E Amalore

Simple and effective teaching aids to help primary school children learn and assimilate mathematical concepts and ideas can be made quite easily from wood and other components available from hardware shops. The design concepts behind these aids are simple too if the mathematical principles underlying them are understood. The teaching aids are easily fabricated, even by a semi-skilled carpenter. Painting them in attractive colours is easily possible.

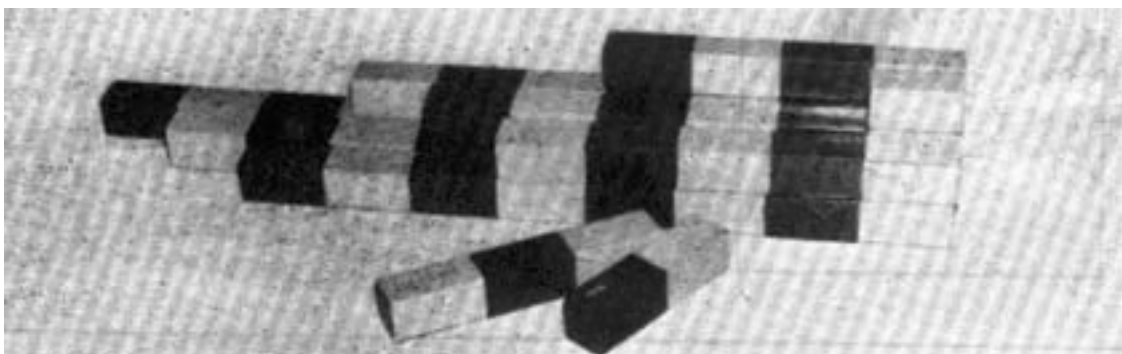
1. Geo-board (to teach numbers)

This is a square wooden board on which plastic pegs are fixed at a constant pitch. The board can be used to teach numbers, digital values, simple geometrical shapes, the relationship between shapes and their areas, etc. Rubber bands and beads are used as teaching accessories along with the geo-board.



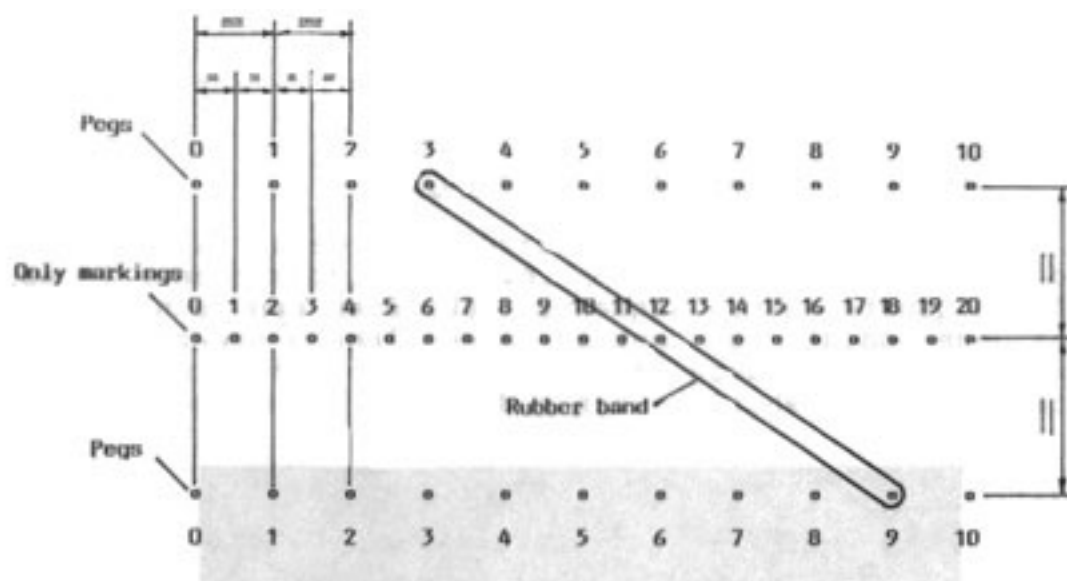
2. Number lines (To teach addition & subtraction):

Square wooden rods of varying lengths can be used to teach addition and subtraction. The rods are marked off into segments, each of them of unit length. Alternate segments are coloured.



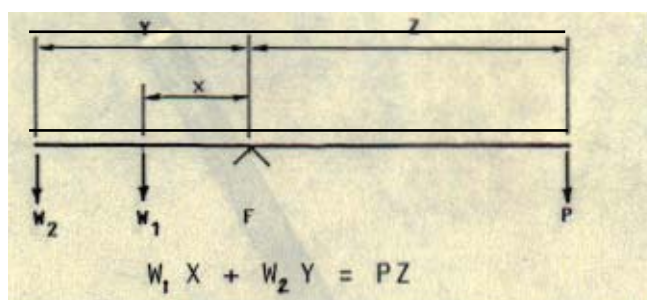
3. Addition board:

Plastic pegs are fixed on a rectangular board as shown in the figure. Numbers are marked below the pegs and also on a line between the two rows of pegs as shown in the illustration. If a rubber band is looped between one top and one bottom peg it crosses over a number in the middle row which is the sum of the top and bottom numbers in question -

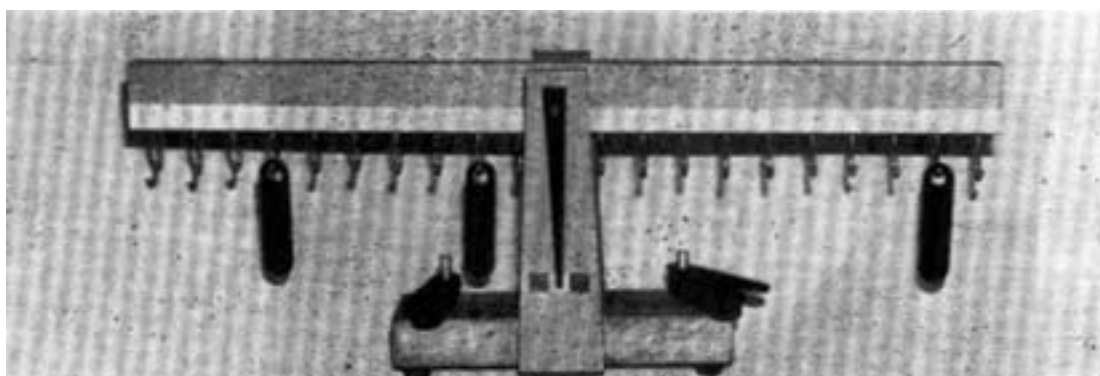


4. Mathematical balance (To teach addition & multiplication:

This device is helpful in teaching addition and multiplication and is based on the first principle of leverage (see figure below).



If W_1 , W_2 and P are all equal to unity, then $X + Y = Z$

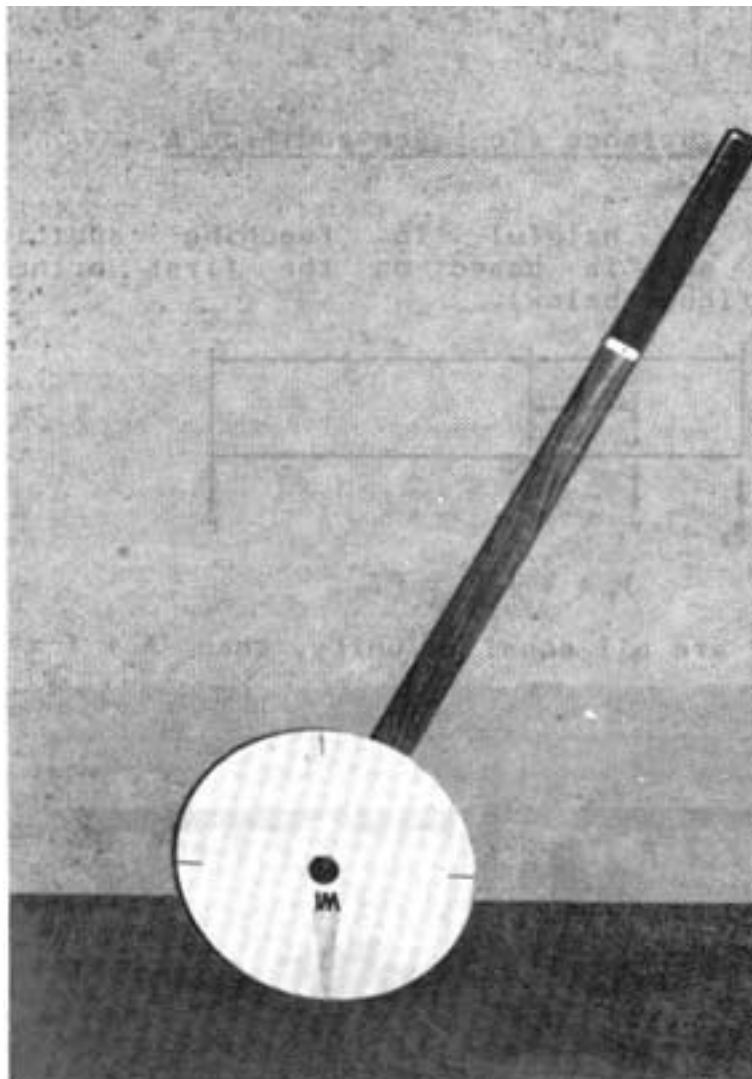


The balance is made of wood and curtain hooks. Weights are hung from the hooks and all of them must weigh the same. Any easily available component, for instance a washer, can be used as a weight. A wood or plastic pointer is fixed to a pivoting pin. The arm of the balance is marked from zero at the centre to 10, at a constant pitch, on either side. A curtain hook is fixed at each of these markings. The arm should be well-balanced when no weight is hung from any hook. The photograph here shows the addition $7 + 2 = 9$.

If two weights are hung from "4" on one side, the balance equalises at 8 on the other side. Thus, $4 \times 2 = 8$.

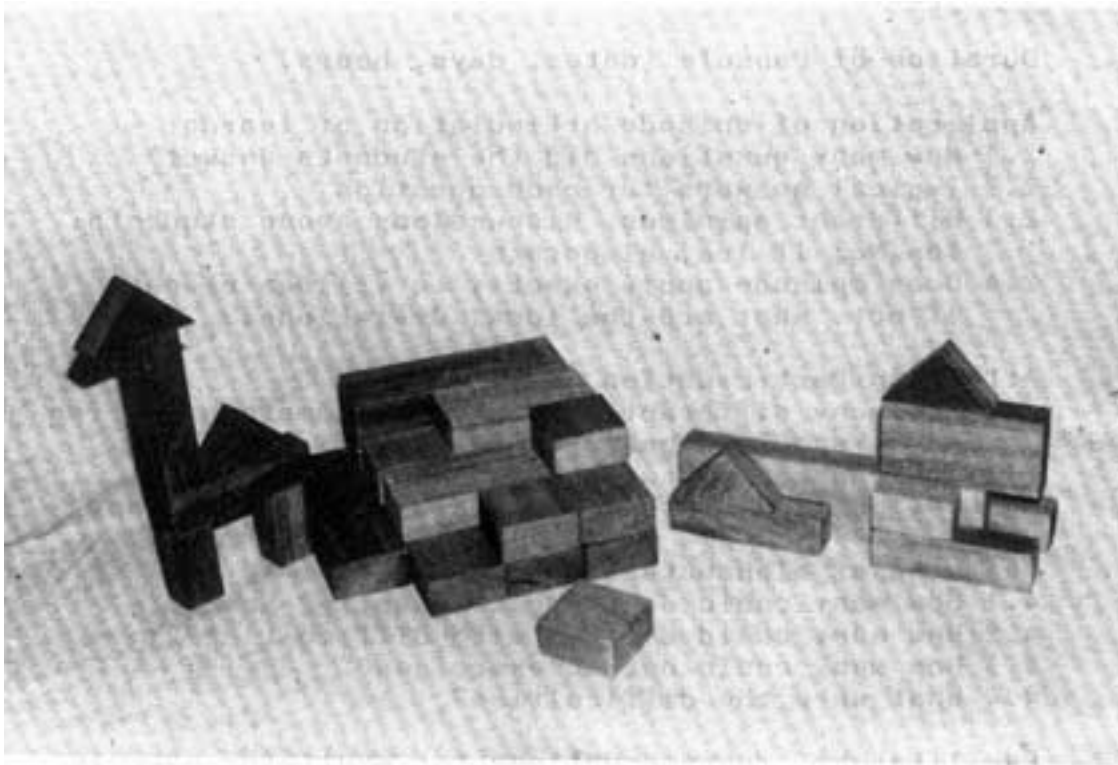
5. Metre wheel (Measuring distance):

A wooden wheel of one metre circumference is fixed by a bolt and nut to a long wooden arm. The circumference is marked off in quarter metre segments. Children can push this wheel from one point to another, even along a zig-zag path, and measure the distance between the two points. Each complete rotation of the wheel covers a distance of one metre.



6. Building blocks:

These are small wooden blocks of different geometrical shapes. They can be used to create simple forms. - buildings, animals, patterns etc.



Appendix 5 : CAPSULE EVALUATION FORMAT FOR TEACHERS

Evaluation Form

0. Attendance register (no. of students participating in capsule)
1. Duration of Capsule (**dates**, clays, hours)
2. Application of episode/articulation of **learner**
 - 2.1 How many questions **did** the **students** answer?
 - 2.2 Typical answers **for** each question
 - 2.3 Different opinions, **discussions** among students:
Yes/No; if Yes, elaborate
 - 2.4 Does episode apply exactly to village or not?
If not, what are **the** local deviations
3. Attention/Participation
 - 3.1 How many different students say something during an episode? Number:
 - 3.2 Are there any students disturbing the class, obviously disinterested, walking out? How many?
4. Learning of alphabets **and** arithmetic
 - 4.1 How many could **do** exercises easily? Number:
 - 4.2 How many could do them with difficulties? *
 - 4.3 How many could not do exercises?
 - 4.4 **What** were the difficulties?
5. Facilitators recommendations for modifying capsule, if any

Instructions for analysis of evaluation forms

<u>Question No.</u>	<u>Analysis/Compilation</u>
0	- Highest attendance, lowest attendance, average attendance (number of students) - names of 3 centres with highest and names of 3 centres with lowest attendance
1	- highest number of hours used for capsule, lowest number of hours used for capsule, average number of hours used for capsule - names of three centres with the highest number of hours, names of three centres with the lowest number of hours

* Only after more than three demonstrations or explanations by teacher

<u>Question No.</u>	<u>Analysis/Compilation</u>
2.1	- highest, lowest and average number - names of centres with high and low numbers
2.2	- for each question, most common answer of all centres, on how many cases this is based, qualitative remark if necessary to describe degree of variation (similar, different, very different)
2.3	- In how many centres were different answers obtained? - In these centres, what was the average, the minimum, the maximum? - Qualitative remark: were these different answers based on different opinions, experiences, knowledge, understanding/intelligence or misleading questions?
2.4	- In how many centres does the story apply exactly, in how many does it not? - Describe deviations
3.1	- Convert in % then average, minimum, maximum, names of minimum centres, maximum centres
3.2	- Convert in % accordingly
4.1	- %, accordingly
4.2	- %, accordingly
4.3	- %, accordingly - Qualitative remark
5	- Summarize suggestions - names of centres which gave suggestions.

APPENDIX 6

RESULTS OF EXAMINATIONS HELD IN AUGUST 1985

(Note: The exams were held for Class I, at the 20 NFPE centres opened in December 1983)

Subject	District	Frequency distribution under different marks-groups					Total no. appeared	Average marks (%)	Percentage above 29% marks	Highest marks recorded
		0-29	30-44	45-59	60-69	70 & above				
Language	Balasore	17	25	52	73	123	290	66%	94	88%
	Cuttack	4	3	2	11	27	47	70%	91	95%
	Pun	3	7	10	13	46	79	71%	91	98%
	Ganjam	4	3	2	9	43	61	74%	93	99%
Total		28	38	66	106	239	477	68.2%	94	99%
Environ- mental & Social Sc.)	Balasore	7	4	7	15	262	295	81%	98	100%
	Cuttack	1	1	3	0	42	47	80%	98	100%
	Pun	2	3	5	9	59	78	77%	98	100%
	Ganjam	0	1	2	1	54	58	83%	100	100%
Total		10	9	17	25	417	478	80.5%	98	100%
Arithmetic & Geometry	Balasore	2	7	8	18	264	299	81%	99	100%
	Cuttack	7	6	7	9	18	47	60%	85	99%
	Pun	5	7	10	6	50	78	71%	94	99%
	Ganjam	4	3	1	8	45	61	75%	93	100%
Total		18	23	26	41	377	485	76.6%	95	100%

APPENDIX 6a

RESULTS OF EXAMINATIONS AT NFPE CENTRES HELD IN AUGUST, 1986

CLASS-I (by district)

Subject	District	Frequency distribution under different marks-groups					Total no. appeared	Average marks (%)	Percentage above 29% marks	Highest marks recorded	No. of NFE centres participating in the examination
		0-29	30-44	45-59	60-69	70 & above					
Language	Balasore	10	6	34	42	88	180	66~2	94.4	98	14 out of 19
	Cuttack	4	4	5	7	24	44	63.8	90.0	97	4 out of 5
	Puri	2	5	14	10	63	94	74.9*	97.9*	100*	8 out of 8
	Ganjam	3	5	17	19	50	94	68.8	96.9	96	7 out of 8
Total		19	20	70	78	225	412	66.8	95.4	100	33 out of 40
Environ- mental Studies (Science & Social Sc)	Balasore	—	2	2	6	170	180	78	100*	100*	14 out of 19
	Cuttack	2	1	2	1	37	43	82	95.4	100*	4 out of 5
	Pun	1	9	12	6	65	93	76.3	99	100*	8 out of 8
	Ganjam	4	1	1	4	83	93	86.6*	95.7	100*	7 out of 8
Total		7	13	17	17	355	409	80	98.3	100	33 out of 40
Arithmetic & Geometry	Balasore	2	2	3	6	169	182	84.2*	98.9	100*	14 out of 19
	Cuttack	1	—	1	5	36	43	79.7	97.7	99	4 out of 5
	Puri	—	3	11	7	73	94	78.7	100*	99	8 out of 8
	Ganjam	—	1	3	9	80	93	79.3	100*	100*	7 out of 8
Total		3	6	18	27	358	412	81.4	99.3	100*	33 out of 40

*Indicgte either highest marks or cent per cent

APPENDIX 6b

RESULTS OF EXAMINATIONS AT NFPE CENTRES HELD IN AUGUST 1986

CLASS—II (District—wise)

Subject	District	Frequency distribution under different mark groups					Total No. appeared	Average marks in %	Percentage above 29% marks	Highest marks recorded	No. of NFE centres participating in the examination
		0-29	30-44	45-59	60-69	70 & above					
Language	Balasore	11	35	68	61	160	335	64.3	96.8	94	19 Out of 19
	Cuttack	5	13	7	9	29	63	60.8	92.0	96	4 Out of 5
	Pun	1	6	16	7	41	71	70.5	98.6	97*	7 Out of 8
	Ganjam	—	1	7	9	28	45	73.9*	100*	96	5 out of 8
TOTAL		17	55	98	86	258	514	65.6	96.7	97	35 Out of 40
Environ- mental Studies	Balasore	1	5	21	18	289	334	83.8	99.7	100*	19 out of 19
	Cuttack	—	1	4	3	55	63	81.3	100*	96	4 out of 5
	Pun	—	2	10	10	49	71	73.9	100*	96	7 out of 8
	Ganjam	—	—	—	—	44	44	90.5*	100*	98	5 out of 8
TOTAL		1	8	35	31	437	512	82.7	99.8	100	35 out of 40
Arithmetic	Balasore	3	6	21	41	265	336	78.6	99.1	100*	19 out of 19
	Cuttack	—	1	5	2	55	63	84.8	100*	98	4 Out of 5
	Puri	—	2	10	12	48	72	75.9	100*	99	7 out of 8
	Ganjan	—	—	1	1	43	45	86.1*	100*	96	5 Out of 8
TOTAL		3	9	37	56	411	516	79.6	99.4	100	35 out of 40