ODL / ICT-initiated Functional Adult Literacy for Sustainable Livelihoods: Case Study of a Pilot Project in a Remote Rural Area of Bangladesh

Dr Manzurul Islam* and Khaleda Manzur, Center for Development through Open Learning, Publishing and Communication (CEDOLPC), Dhaka, Bangladesh

e-mail: cedolpc@gmail.com and manz82riy@yahoo.com

Abstract

A case study of a pilot project being carried out in a remote village (Arshinagar, Shariatpur) in Bangladesh aiming at alleviation of poverty through functional adult literacy is presented. The focus is on initiatives undertaken through open and distance learning, using ICT. Basically, the activities have been performed by 35 women and 20 men of 25 to 60 years of age; after learning the basics of literacy, they began developing skills for the girls and women in occupational works like tailoring and embroidery for better livelihood. Eight Tutors and Trainers, in addition to the team of project members comprising senior specialists from reputed research and development organizations are resource persons. The project particularly had teaching via face-to-face and audio-video, CD/DVD, moblie use and personal level motivation and awareness activities. After a year's schooling, the learners will be expected to attain workable literacy and skills in various occupations and behaviours that will contribute to their living condition and generate further income for their families.

Till now, most governmental and non-governmental programmes in adult or functional literacy have been through traditional or non-formal teaching and training. No significant attempts have been made through ODL mode or through ICT-mediated activities. The current model will be innovative in this and particularly for women and adults.

Equipment consists of two personal computers, one printer, one television with DVD, audio cassette player-cum-transistor for every group of 25 learners, plus two sets for the Learning Centre, some essential furniture and three mobile sets. One generator has been installed as there is no electricity in the village as yet.

The Center for Urban Studies (CUS), a 35-year old reputed research organization in Dhaka, now also addressing rural-urban migration and livelihoods, is carrying out the project by the Center for Development through Open Learning, Publishing and Communication (CEDOLPC).

[* also, till recently, Adviser at Bangladesh Open University, Gazipur and currently, Adviser, Center for Open and Virtual Learning (COViL), Southeast University, Dhaka].

1. INTRODUCING THE PILOT PROJECT

- 1.1 Centre for Development through Open Learning, Publishing and Communication (CEDOLPC) is an independent, non-profit development and research organization that adopted an innovative approach in serving education, research, training, communication and community development, sharing expertise and support. Its main focus is to assist in poverty reduction for less privileged individuals and societies. Arshinagar Project is one of the major CEDOLPC projects which began its operation experimentally since December 2006 and formally from 1st April 2007. This was in association with COL, Center for Urban Studies (CUS), Pimedia and Fatema-Quadir Foundation (F-QF). The aim of the project is to alleviate poverty through open and distance learning, using ICT in a remote and rural location, Arshinagar.
- 1.2 Aimed at alleviating poverty through open and distance learning, using ICT in a remote, rural location in Bangladesh, the project basically performed through promoting functional literacy for skills development for better livelihoods. The programme involved eight Tutors and Trainers from among the local school teachers of the project site, in addition to the team of project members comprising senior specialists from reputed research and development organizations as resource persons and part-time consultants. The Tutors conducted literacy teaching classes for 57 learners, as a model test case. The original target was for 40 learners.
- 1.3 The project particularly carried out programmes for the girls and women in their familiar and occupational works. Teaching was partly like the ODL-mode, via face-to-face and audio-video, internet and personal level motivation and awareness activities. After a year's schooling, from April 2007 to March 2008, fifty-one learners attained workable literacy including 18 girls and young women who developed skills in tailoring. All learners had regular briefings on the awareness of behaviours that contributed to their living condition and generated further income for the family. The income is small at the moment, in this pilot project, but this has all indications that in course of time the participants would be self –reliant to a great extent. As a result, by becoming functionally literate as well as part income generators for the family, they grew more confidence in themselves; they felt little more proud and respectable to the local community.
- 1.4 As soon as the model was set up at village Arshinagar, under Shakhipur police station of Shariatpur district, (110 kilometres away from the capital city and headquarters of CUS / CEDOLPC, the lead institution(s) of the project), it also led to other experiments and practices which indicated their possible implementation all over Bangladesh.
- 1.5 Till now, most governmental and non-governmental programmes in adult or functional literacy have been through traditional methods or non-formal teaching and training. No significant attempts have been made through ODL mode or through ICT-mediated activities. The current model was innovative in this and particularly for women and adults. For open learning and skill development, one other institution is Bangladesh Open University which restricts its works at the secondary and higher level. Besides, as a public sector organization, BOU has its own limitations. Not much in the lower level or at literacy stage is carried out here through ODL or ICT.

2. EQUIPMENT USED

- One large screen colored TV, with DVD player (with cabinet)
- Four personal computers (with cabinet)
- One printer and a scanner
- One generator (since no electricity), plus cost of fuel
- ➤ 12 CDs + two course books + 1 Teachers' book, other study materials (practice notebook, pen / pencil, slates) to all learners
- Three Blackboards, chalk and duster, etc. for three Sections
- Some high benches and tools, some chairs and tables
- Two sewing machines and accessories, 1 large table.

ICT facilities were installed from the very start of the programme. The timeframe and other schedules were observed as fully as possible. Resource persons comprised national experts with international experience and recognition.

3. FUNDING

- 3.1 . The lead institution mobilized necessary funds from Central Understanding Fundamentals (CUS) itself, CEDOLPC, COL and other sources. Results are expected to be of interest to some more organizations that work for rural development and poverty reduction.
- 3.2 As the project was implemented by a well established research and development organization with active support from other institutions specialized in the field of ODL and ICT, it should prove as a model for many and as one sustainable for a reasonable period.

4. BULLETIN

A Bulletin was published covering various activities of the project; this was circulated to concerned individuals and agencies. The Bulletin was well received.

5. BRIEF DESCRIPTION OF THE PROJECT

- 5.1 The project was completed within 12 months, as per schedule. The assigned course books were strictly followed during the academic year. Outcomes of some project activities are:
- 5.2 **Literacy programme**: After a one-year completion of Arshinagar Adult Literacy Centre activities, the adults successfully completed learning of Bengali for both reading and writing as well as for simple arithmetic.
- 5.3 **Training in tailoring:** Ten out of more than 12 trainees have completed the sewing training very well. These girls can now cut and sew like professionals. They are able to run their business by themselves. Already they received order for making school uniform of a local institution.

5.4 Awareness building through ODL/ ICT

- 5.4.1 At present most of the learners are able to put their signature in full. They can read Billboards, letters, headlines of newspaper, etc. Women are now more confident of their skill.
- 5.4.2 Learners are also more aware of their health, hygiene, and sanitation. They learnt these important health factors through CDs and VCDs. They also took ideas for better improvement / management of their poultry, fishery, vegetable gardening and small agriculture.
- 5.4.3 Basically the remote rural people of Arshinagar also got orientation in computer literacy. They learnt how to change a letter by clicking the mouse. It is not only a great pleasure but also a help to them in the learning process.
- 5.5 **Youth development:** Six young girls / women and two young men were involved in teaching the adults. They developed leadership skill for the local community and gained experience in teaching. They also earned some money for their part-time services.
- 5.6 **Community fellowship**: Community fellowship is another important output of this project. A seven-member local management committee was involved in various activities where they organized participatory meetings among the local seniors, monitored the project activities and made recommendations to Dhaka Headquarter Office.
- 5.7 **Removal of darkness by a generator:** Arshinagar was deprived of electricity. The use of generator by the project has changed the mindset of the village people. They watched television and computer by using the generator, though for two hours a day.

- 5.8 **Monitoring and Evaluation** was carried out consistently for quality control as well as for achieving effective outcomes. Every two months, one / two supervisors visited the project area for the purpose. M & E was carried out:
 - ✓ By Inspectors from Dhaka
 - ✓ By local Inspectors
 - ✓ By High School Teachers and Monitors
 - ✓ One-two full time Field Supervisor and two part-time assistants
 - ✓ By Mobile phones regularly from Dhaka (the Chairman and the Executive Director of the Project)
 - ✓ By monthly examination (total 8 exams were held during the project period)
 - ✓ By Reviewing the works and re-organization of the local management and Staff from time to time

6.FINDINGS

- 6.1 **The adult literacy** centre at Arshinagar under Shariatpur District had three sections i.e. 'Ka', 'Kha' and 'Ga' (A, B, C) for both male and female learners. Most of them are of 31 to 60 years old. The average learners are 13 female and 11 male in 'Ka', 12 female and 5 male in 'Kha', 13 female in the 'Ga' group. Fifty-three learners are literate now, which will be 100 by the next extension of the project. Ten to 12 women are very well trained in sewing and also able to work in business environment. Already these women have received orders for making uniform for the high school students. At present they have two sewing machines, one more will be provided by the organization soon.
- 6.2 **In terms of ICT**, they are aware of the use of computer, generator and mobile and also able to use these technologies. People of different age and sex are willing to learn and get better skilled. Some incentives were given, like two rickshaws and two houses among the learners during the last devastating flood.
- 6.3 **Some interruptions** made the activities of the project occasionally slow. Specially the natural calamities like nationwide flood and the devastating cyclone, Sidr. Use of generator was also very expensive in absence of electricity. Rough road communication was another problem to commute in person from the headquarters.

7. ACTIVITIES PERFORMED

The project for enhancing literacy and skills for better livelihoods was conducted:

- √ Via audio / radio
- √ Via television / use of video with appropriate programmes for adult learners
- ✓ Playing recorded programmes from Bangladesh Television on adult education / nonformal education at the convenient time of the learners
- ✓ Face-to-Face teaching / learning six days a week for two hours everyday (Bangladesh Open University practices this only on Fridays). Special audio-visual aids and other study materials are used.
- ✓ Via workshop with advanced training sessions for Team Members / Coordinators / Trainers / Advance Learners on small entrepreneurship, income generating activities such as handicrafts, embroidery like 'Nakshi Katha', sewing, poultry, vegetable or kitchen gardening, health and hygiene issues, planned family management for better living etc.

8. DATA COLLECTION STRATEGIES

Data were collected through questionnaire by the field investigators from Dhaka and teachers. The specific data collection strategies were as follows:

 To create a bench mark data on the learners so that changes through such programme can be monitored and traced. Potential learners were selected both from women and adult male among the poor who hope to use their acquired knowledge in alleviating poverty.

9. SOME LIMITATIONS

- Although desired sufficient number of orphans as planned in the original proposal were not found for computer training, very poor learners were picked up
- Training programme on handicraft and embroidery for the female learners at another district could not be organized
- Sometimes retaining the learners for one full year was difficult; but ultimately managed successfully
- More incentives were requested; could not fulfill all
- Poor communication between Dhaka and the project site
- Absence of electricity
- Number of interested people was higher than the capacity
- Three different centres in place of one centre; this made it difficult and more costly.

10. EMPLOYMENT IN THE VILLAGE

- 10.1 By way of some part-time involvement for one year, the project opened test opportunities for employment of some local villagers as:
 - 1 Fulltime male Field Supervisor
 - 2 Part time female assistants, including one maid
 - 2 Part time youths (1 security staff and another caretaker)
 - 3 Part-time volunteers
 - 8 Part-time Tutors (6 being young women)
 - 10 Tutors and Managers
- 10.2 Besides, 7 local community members who acted almost on voluntary basis, including 3 youth, developed leadership opportunity.
- 10.3 Fresh re-awakening was growing among the local people that they could organize and manage themselves for their affairs and literacy and could reap benefits to compete with other developing villages.

11. TABLES AND CHARTS

The following Tables and Charts will demonstrate various activities and performances:

Table 11.1: Number of learners and Tutors at different times

Month	Units	Sections	No of learners	No of Tutors
February '07	Adult Literacy Centre	1	22	2
May '07	Adult Literacy Centre	3	22+35= 57	6
February '08	Adult Literacy Centre	3	53	8
March'08	Vocational and Sewing Centre	With 2 machines under small groups of 5 or 6	12+10=22	1
March'08	ICT / Computer Literacy Center	10+9	19	1

Table 11.2: Learners of the three Sections participating in four randomly selected Tests

Starting Time	Section / Unit	F (Female)	%	F (Male)	%	Total no learners Sections	(in 3	Total
						Female	Male	
1 st	Α	14	34.14	06	50.00	41	12	53
February	В	16	39.02	06	5.000			
'07	С	11	26.82	00]		
November	Α	8	36.36	6	42.87	22	14	36
'07	В	7	31.81	-	-			
	С	7	31.81	8	57.14			
December	Α	11	33.33	7	36.84	33	19	52
'07	В	14	42.42	-	-			
	С	8	24.24	12	63.15]		
February	Α	7	33.33	5	62.50	21	8	29
'08	В	7	33.33	00				
(Surprise Test)	С	7	33.33	3	37.50			

Table11.3: Results in the Tests by Male Learners in all three Sections (in December 2007)

Marks obtained	No of students (F)	Percentage
66-70	2	10.52
71-75	2	10.52
76-80	2	10.52
81-85	3	15.78
86-90	4	21.05
91-95	1	5.26
96-100	5	26.31
Total	19	100

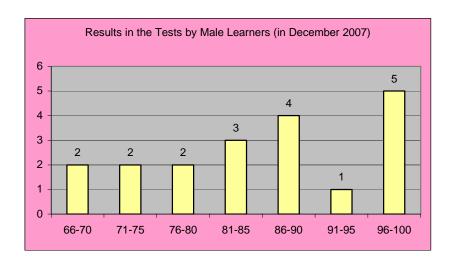


Table11.4: Example of results in one monthly test (December 2007) by Female Learners in all Three Sections

Marks obtained	No of students (F)	Percentage
56-60	1	3.03
61-65	1	3.03
66-70	3	9.09
71-75	5	15.15
76-80	3	9.09
81-85	4	12.12
86-90	2	6.06
91-95	8	24.24
96-100	6	18.18
Total	33	100

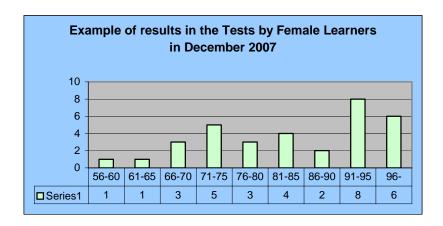
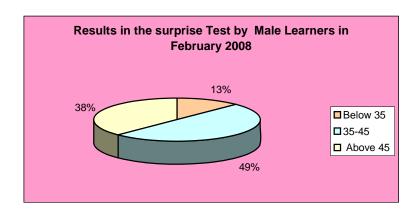


Table11.5: Example of results of one surprise Test (in February'08) by male learners in 3 Sections

Marks obtained	No of Students (F)	Percentage
Below 35	1	12.50
35-45	4	50.00
Above 45	3	37.50
Total	8	100



12. A SOCIO-ECONOMIC STUDY

This was simultaneously carried out by CUS field investigators of the project. In this, 26 (out of 53) randomly selected adult Learners participated. The following Tables show the results:

Table 12.1: Household members in Respondent's family

Number of Members	Frequency	Percentage
1	1	0.72
2	4	2.89
3	9	6.52
4	8	5.79
5	25	18.11
6	30	21.73
7	28	20.28
8	24	17.39
9	9	6.52
Total	138	100

Source: Field Survey, February, 2008

12.2 Educational situation of family members

Majority of household members (about 45%) were found illiterate. 13% had primary level education.

Table 12.2: Present status regarding Schooling

Status	Frequency	Percentage
Ongoing	66	47.82
Dropout	56	40.57

Never	16	11.59
attended		
School		
Total	138	100

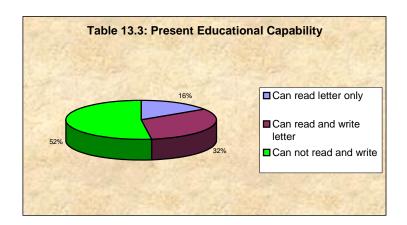
Source: Field Survey, 2008



Table 12.3: Present educational ability

Status	Frequency	Percentage
Can read letters (correspondence) only	22	15.94
Can read and write letters	44	31.88
Cannot read and write	72	52.17
Total	138	100

Source: Field Survey, 2008



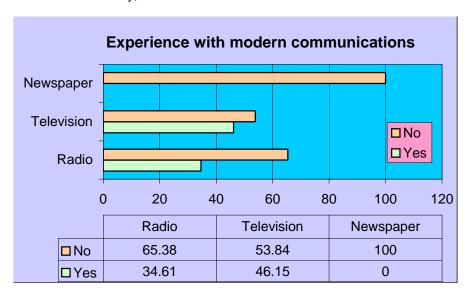
13. EXPERIENCE OF MODERN COMMUNICATION SYSTEM

All the 26 respondents were asked about their experience with radio, television and newspaper for assessing the accessibility to these modern telecommunications. The analyzed findings and respondents' feedback have been shown in detail in Table 13.1.

Table 13.1: Experience with Radio, Television and Newspaper during the last week

Variables	Response				
	Yes (F)	Percentage	No (F)	Percentage	
Radio	9	34.61	17	65.38	26
Television	12	46.15	14	53.84	26
Newspaper	00	00	26	100	26

Source: Field Survey, 2008



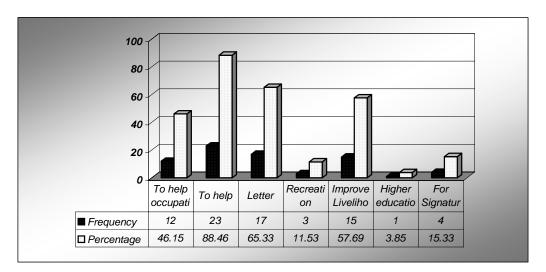
13.2 Level of education

The respondents were also asked about the use of their educational attainments. Details of their opinions are shown in Table 13.2.

Table 13.2: Use of education by the Respondents

Opinions	Frequency	Percentage
To help occupation	12	46.15
To help schoolgoing children	23	88.46
Writing and reading Letters	17	65.33
Recreation	3	11.53
Improve livelihoods	15	57.69
Higher education	1	3.85
For signature	4	15.33
Total	26	100

Source: Field Survey, 2008



13.3 Incentives to learners

Occasional incentives (saree, lungi, blanket --- one each to male or female learners) were given to the learners during flood, cyclone, etc., Eid festival, etc. More were expected, most of the learners being extremely poor.

14. CONCLUSION AND RECOMMENDATIONS

14.1 100% literacy by 2010

It was rare that for such a small project, several national level important personalities and experts visited the project in an extremely remote area; in fact, some of them took time to even monitor and advise. This was an encouragement to the innovative project and a booster to the morale of the local people more of whom should convince the remaining illiterate few to become literate and functionally literate. All this for achieving 100% literacy in the project village and beyond in some other villages of the country, within two years by 2010, that is much earlier than governmental schedules and MDG target date (2015!)

- 14.2 Although targeted for 40 people, 53 have already been successful as functional literates under this project. Similarly, 12 out of 22 were trained up in sewing and embroidery work, though the target was for 10. This indicates positive achievements of the test project.
- 14.3 The present initiative with part-time but regular and well monitored Tutors for 12 continuous months with part-time learners and with possibility of sustainable expansion programme later will

encourage efforts by both governmental and non-governmental sectors. The target of attaining livelihood means through skills development and functional literacy is expected to be achieved faster and more effectively. External funding such as by COL strengthened the efforts of CUS, CEDOPC, *Pimedia* and others in the project, as it grows.

- 14.4 Now that the local Tutors and project staff have gained necessary experience from the Test Model for successful functioning, similar financial assistance from COL or any other concerned agency for another year would contribute much to ease the implementation and continuation of the programme in fullscale for the second year. Thereafter, in the years that would follow, activities are expected to move forward more smoothly. Thus in a way, the project execution agency, CUS / CEDOLPC, would have to address the challenge in a bold manner.
- 14.5 Even during the forthcoming national and local Elections, the neo-literate adults would now be in a position to check for themselves their own names and IDs and they would put their signature easily and correctly --- which would be a proud and convincing feeling, for the first time in their life.

=======