

Let's Teach Ourselves

The operation and effectiveness of a People's literacy movement

September 1997

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Thanks to:

- The many people in Bangladesh who allowed me to interview them and the others who helped me in many different ways
- Tom Cawthera for proof-reading the manuscript
- Roger Iredale for his comments, interest and encouragement
- Alan and Anne Wilkinson for their generous hospitality and stimulating conversation in Dhaka

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Glossary of Acronyms, Bangladeshi and other terms

AA	ActionAid
ADB	Asian Development Bank
Androgogy	Methods related to adult learning and teaching
Bhut	"Spirits"
DC	District Commissioner
DCO	District Commissioner's office
DFID	Department for International Development (formerly ODA - Overseas Development Administration)
DNFE	Directorate for Non-Formal Education
DPS	Deposit Pension Schemes
EFA	Education For All
GRO	Grass-Roots Organisation
GOB	Government of Bangladesh
IDA	International Development Association (An associate of the World Bank)
INFEP	Integrated Non-formal Education Programme
Hatal	General strike
HSC	Higher School Certificate (Grade 12)
MEP	Mass Education Programme
MLM	Mass Literacy Movement
NAP	National Action Plan
NFE	Non-Formal Education
NGO	Non-Government Organisation
PO	People's Organisation
PSC	Public Service Contractor
PRA	Participatory Rural Appraisal
RCU	REFLECT Co-ordination Unit
REFLECT	Regenerated Freirean Literacy through Empowering Community Techniques
Shomti	Co-operative
SNWP	Saptagram Nari Swanirvar Parishad
SSC	Secondary School Certificate (Grade 10)
TLM	Total Literacy Movement
Thana	A government administrative unit
TNO	Trans-National Organisation
VO	Voluntary Organisation

Exchange rates used:

£1 = 71 Taka

\$1 = 44 Taka (rates on August 6 1997)

Abstract

This monograph is concerned with the effectiveness of literacy work and its role in development. It initially reviews the literature on development, education and literacy, noting that whilst it is commonly assumed that literacy is fundamental to development, there is little published research into the effectiveness and effects of work in adult literacy to support this. Donors are therefore reluctant to work in areas where the outcomes are unknown and data is hard to gather.

The monograph continues by looking at the types of organisations working in development and literacy, placing this in a context of changes in development thinking in the last half century. Issues involved in testing literacy are subsequently examined with Ziegahn's literacy test being trialled and modified to a test that can be used with a group of twenty neo-literates to determine functional literacy in under two hours.

The monograph finally focuses on Nijera Shikhi: a people's literacy movement in Bangladesh. It places this in the context of literacy work done by the government and ActionAid's, REFLECT method. By testing neo-literates at least twelve months following the completion of their course, and by interviewing neo-literates to assess the life changes that have occurred as a result of becoming literate, Nijera Shikhi is found to be both extremely low-cost - £1.20 per learner - and highly effective with 73% of those starting the course sustaining functional literacy. Also documented are many of the substantial changes that occur in people's lives as they develop their literacy skills using Nijera Shiki's methods of self-education. The possible reasons for this are explored with the concept of "social energy" emerging as a critical resource. Issues relating to different methodologies for educational planning that are enriched by post-Newtonian thinking are subsequently explored before conclusions are drawn.

1. Development, Education and Literacy

What is development?

The meaning of development is fundamental to all developmental work. As defined by economists it is an increase in living standards which is best measured by increased household income or GNP per capita. Many social developers see it as having more to do with empowerment - people, communities, and nations having greater control over their lives and destiny.

To Seers (1969) development is almost a synonym for improvement - the aim of which is "The realisation of the potential of human personality" (Seers 1969: 10). For this to occur certain ingredients are necessary. On one level food, a job or means of subsistence, and a reasonable degree of equity within a country are needed. On the next level adequate education, participation in government and belonging to an independent nation are necessary. On a further level Seers sees freedom from repressive sexual codes and from noise and pollution as being important.

For Carmen

"The word "development" should be reserved for what it was coined in the first place: to indicate growth, yes, but also and above all to invoke creation, culture, education, ownership and control, the satisfaction of fundamental human needs and everything involving autonomous human agency" (Carmen 1996: 209-210).

From these perspectives, it can be seen that development is more than just growth. Meier (1995) talks about 'growth plus change'. Change, usually results from learning. Learning is, of course, one of the goals of education.

However, Western industrialised society usually seeks to assess and quantify progress. Money acts as a unit of account and is the easiest way to measure the production of a diverse range of goods and services. Therefore, household income and GNP per capita have become widely accepted as indicators of development. While economic growth should not be neglected - it is included by the three authors cited - development is more than this. The problem is that the measure can easily become the aim. An increase in GNP per capita can be seen as development. While this might be the case - certainly if a person is struggling to meet basic physical needs an increase in real income will help "the realisation of the human personality" - it would be wrong to assume that such an increase automatically results in development. To do so would be to ignore other aspects of human living mentioned by Seers, Carmen and others, which are a part of development. Improvements in family health and environment, reductions in crime and increased safety are a part of development. Things such as trust, art, culture, friendship, love, learning and the appreciation of beauty are a part of the

"realisation of human personality" yet can be difficult to include in GNP statistics and other indices. However to ignore them could mean that we are in danger of creating a world where people live to consume and produce rather than producing and consuming to live.

Education and development

To see development as more than economic growth is important when looking at education. Education may lead to greater economic growth, but this is not the sole measure of its contribution to development. Education can help the "realisation of human personality" and "everything involving autonomous human agency" in the type of areas already mentioned. However, while development economists should not consider education solely for its relationship to economic growth, it is equally important that sociologists, educationalists and anthropologists are aware of the part growth can play in development together with the role of education in this process.

The relationship between education and economic growth is far from clear and straightforward. Looking at education as a means of increasing "Human Capital" one would expect that it would lead to higher personal and national income. In examining this through a "micro" approach, plenty of evidence can be found to indicate positive rates of return. In Thailand, each year of schooling was found to add 2.5% to farm output (Lockheed, Jamison and Lau 1980). In Indonesia, a return of 14.5% to junior secondary education in urban areas is reported (McMahon and Boediono 1992). In Paraguay, average private returns of 11.5% were found for each year of schooling (Psacharopoulos, Velez and Patrinos 1994). However, Blaug (1976) has pointed out that few labour markets function "perfectly". This is illustrated by Chinese sayings such as "being as poor as a professor" and "the surgeon's scalpel is less profitable than the barber's knife" (Leung 1995). Furthermore, it may be that educational qualifications are a proxy for ability or class and are merely a "screening device" for these. However, research involving identical twins, Vietnam war draftees and so on, does to some extent refute the screening hypothesis (see Ashenfelter and Krueger 1991 in Psacharopoulos 1994).

At a "macro" level various production functions are used to calculate the rate of growth of an economy. The unaccounted for 'residual' is attributed to education. Dennison (1962) pioneered this approach on the US economy. Nadir (1972) used a similar method on developing countries finding that 16% of the growth in Argentina could be accounted for by education, with figures of 1% for Mexico, 2-3% for Venezuela and 15.9% for Korea. Other figures have been produced for other countries (see Psacharopoulos and Woodhall 1985: 17). However, it must be remembered that the 'residual' is a 'black box', which could contain a host of other factors.

More sophisticated econometric models such as Hicks (1980) used literacy as a proxy for education, relating it to growth in 83 developing countries. He found that the twelve countries with the highest growth rates had above average levels of literacy and life expectancy. However, as with the residual approach, correlation does not prove causation. All it does is show that “more developed societies spend more on education than less developed societies and educated employees tend to earn more than the less educated. The problem however is one of cause and effect” (Morris and Sweeting 1996: 6).

Economic historians have taken a longer term macro view. In so doing Easterlin concludes that the spread of economic growth depends on greater learning potential and motivation arising from the development of formal schooling (Easterlin 1981 in Psacharopoulos and Woodhall 1985). However, Morris questions this: “If education plays a critical role in development one would expect to see a pattern of expanding education prior to or in parallel with the process of rapid growth and industrialisation. However economic historians provide limited evidence to support such a scenario” (Morris 1995 in Morris and Sweeting 1995: 10). Whilst seeing Japan as an exception, he points out that in northern Europe and the US, growth is not closely linked with education provision. For example, the UK lagged behind in educational provision. France and Germany developed sophisticated public systems of mass education a hundred years before they industrialised. Prussia legislated for compulsory schooling up to age 14 in 1826. England achieved this only in 1921.

Research, therefore indicates that the relationship between education, growth and development is not straightforward. Perhaps the difficulty lies in Western ways of “either-or” thinking when other cultures are more appreciative of “both-and” perspectives. Education is perhaps not *either* a cause *or* a consequence of development but is *both* a cause *and* a consequence. Such a view is affirmed by Sweeting in examining the relationship between education and the recent rapid growth of Hong Kong “data suggests that such linkages are rarely direct, linear and causal” (Sweeting 1995: 73). He concludes:

“..education ... did not and does not determine development. Development did not and does not determine education. In relation to development, education was certainly not the horse; nor, however was it merely the cart. As we have seen, the links between education and development are many and complex. They are also intricately fascinating. The relations between them are symbiotic, mutually supportive, but they are not uni-linear” (Ibid.: 75).

Literacy and development

If research into the relationship between education and development is characterised by its inconclusiveness, then research concerning the relationship between literacy acquisition in adulthood, and development is characterised by its scarcity. What little research there is, is generally carried out at a “macro” level and rarely distinguishes between literacy acquired in adulthood and that which is acquired in childhood at school. Thus the research of Hick (1980) already cited, takes literacy as a

proxy for education, and does not look just at literacy acquired in adulthood. Varghese (1997) cites the work of Bowman and Anderson (1963) who argue that 40% literacy is needed for a 'take off' and 80% for sustained economic growth. However, this again makes no distinction as to when literacy is acquired so that literacy could well be an indicator of general schooling. Additionally, as has been previously noted, correlation does not prove causation. The position is best summarised by Wagner:

"What is surprising is how little information is available on the economic returns to training in *adult* literacy and *adult* basic education. There are few if any empirical studies on the economic impact of major short-term literacy programs in developing or industrialised countries...there is virtually no evidence from developing countries that adult literacy programs lead to actual economic improvements in the lives of program participants" (Wagner 1995: 342-3).

We have already noted that development is more than just economic growth. Therefore, what might be called the "social" consequences of literacy should also be considered. Again, research evidence is hard to find. Psacharopoulos and Woodhall (1985: 296) cite research by Cochrane from more than twenty developing countries suggesting some relationships between literacy and fertility but this again looks at literacy in general and identifies correlation not causation. Laurel Puncher in an article examining the relationships between literacy and early childhood development, health, women and families writes:

"The relationship between women's literacy and development variables has been repeatedly documented, but much of the evidence is anecdotal, and many of the correctional (statistical) effects may come from schooling or other associated variables, (e.g. SES) rather than from literacy, *per se*. ... There is remarkably little evidence that literacy attainment among women (in particular), in the absence of certain other variables, has a positive socio-economic effect on their lives. In fact, studies which attempt to determine how education influences variables such as health and fertility indicate that literacy itself may have little to do with improved outcomes" (Puncher 1995: 311-2).

"Although some researchers have used evidence from studies of effects of education on child mortality, fertility, and life expectancy to support adult literacy programs, there is no evidence that the ability to read and write is what brings about the positive effects observed" (*ibid.*: 317).

Wagner (1995: 345) makes similar points while Archer and Cottingham in an examination of groups using the REFLECT method against control groups using other methods assert:

"Literacy does not empower people. The control groups showed very few signs of having changed people's lives. It seems that many of the past claims about the benefits of literacy are bogus. Literacy in itself probably does not empower and does not bring benefits in respect of health, productivity, community organisation, population growth etc." (Archer and Cottingham 1996: iii).

However, this is not to assert that literacy does not or cannot have an effect, or that there is no evidence to indicate this. Iredale cites an unpublished study by the University of Liverpool, which examined data from Nicaragua in the 1980s. It was found that "child mortality was 18% higher among the offspring of illiterate women than among those who had undergone adult education, while the risk of low arm circumference for age was 59% higher and the risk of low weight for age was 85% higher"

(Iredale 1994: 32). Wagner (1995) cites research by Mikulecky, which estimates the direct costs of adult illiteracy on American business to have been about US\$40 billion annually.

From this, it must be concluded that evidence on the relationship between literacy and the various dimensions of development is sparse and inconclusive. This is not to assert that literacy does not contribute to development, but that there is a need for further research in this area before any conclusions can be drawn. As Rogers writes:

"Contrary to what is often assumed, it is simply not known whether the acquisition of literacy skills brings with it any direct economic or other benefits. There is some anecdotal evidence but nothing systematic" (Rogers 1994: 55).

It is against this background that the research outlined in this monograph was conducted. It first describes a benchmark text, which was derived in order to measure the effectiveness of adult literacy programmes. This test is subsequently used to determine the effectiveness of one particular scheme and is combined with cost data to derive figures for cost effectiveness. Secondary data from other programmes is also used to contextualise these findings. In addition to this, the findings of research into the effects of becoming literate are outlined. This was collected from semi-structured interviews with individuals and small groups a couple of years after they had acquired literacy. It indicates that in the right context, using appropriate methods, literacy acquisition in adulthood can bring about considerable changes in people's lives, including substantial increases in income/productivity. It is hoped that these findings will stimulate renewed interest from policy makers, donors, and researchers who are interested in the place of adult literacy in the abolition of world poverty.

2. Literacy, its assessment and assessing the quality of literacy work

What is literacy?

In order to assess literacy and the quality of literacy work it is important to have a clear idea of what is meant by literacy. Assessing literacy would be much easier if a person could be described as either literate or not literate. However, literacy is obviously a sliding scale between two extremes. If people were either literate, or not literate, there would be a moment in time when they passed from one to the other. If there were such a moment then its definition could only be arbitrary. As people learn, they become more literate and numerate. Literacy and numeracy must be a continuum, and there are different levels of attainment, the definitions of which are ultimately arbitrary, but which could be standardised. It should also be noted that there are different literacies: just as a person may be literate in English but not in Russian, so there are different literacies in say an urban and a rural setting.

Literacy assessment

Assessing literacy skills is a surprisingly neglected area: "The problem of assessing literacy and evaluating literacy skills is one which is rarely addressed, but when it is the tests are usually derived from primary schools" (Rogers 1994: 20). Ziegahn echoes this point. In assessing literacy she writes "...researchers are called upon regularly to plunge into the morass of seemingly endless possibilities for the definition and measurement of 'literacy'.." (Ziegahn 1992: 223) there are no standard definitions though some guides are emerging.

Wagner (1995: 352) identifies four categories with which to analyse literacy:

- a) *Non-literate*: A person who cannot read and write simple text with understanding or recognise words or signs or documents in an everyday context or sign his or her name.
- b) *Low literate*: Someone who cannot read and write a simple text with understanding but who can recognise words or signs or documents in an everyday context and can sign his or her name.
- c) *Moderate literate*: A person who can, with difficulty (i.e. making numerous errors), read and write a text with understanding.
- d) *High literate*: Someone who can, with a little difficulty (i.e. making some errors), read and write a short text.

Numeracy is defined as "the ability to make effective mathematical use of a number system" but lacks the further degree of classification given to literacy.

Linda Ziegahn (1992: 223) uses two categories as defined by UNESCO:

- a) *Literate*: someone "who can with understanding both read and write a short simple statement on his everyday life."
- b) *Functionally literate*: someone "who can engage in all those activities in which literacy is required for effective functioning of his group and community and also for enabling him to continue to use reading, writing and calculation for his own and the community's development." (see also UNESCO 1991: 28)

There are two compelling reasons for using these definitions. Firstly, they are meant as world-wide guidelines. Secondly they include both reading and writing which are the two skills most associated with literacy; calculation is less often included.

Ziegahn, in her article gives a detailed account of the tests that were used in literacy assessment in Lesotho and of the scoring system used. This account is detailed enough to be used as a model for other work but not detailed enough to be precisely replicated. It is used as a basis for the literacy assessment involved in this research in Bangladesh.

Assessing the quality of literacy work

To assess the quality of literacy work it is important to have criteria against which to assess it. In addition to assessing the acquisition of the technical skills of literacy and numeracy, the changes in people's lives resulting from this acquisition are also important. Thomas (1992) identifies two conceptual origins to the concept of empowerment. These provide a useful perspective through which to view literacy work.

The first can be characterised as the "tools for self-reliance" approach. This asserts that the important task is to provide people with skills and tools. Thus equipped people can then change their lives as they wish and so improve their livelihoods. "Give a person a fish and they have food for a day, teach a person how to fish and they have food for life" exemplified this approach which is most associated with Fritz Schumacher. From this perspective literacy is a tool and the main purpose of literacy work is to enable people to become literate and numerate so that they can improve their lives.

The second is associated with Paulo Freire and is characterised more by the phrase "reading the word to read the world". This view sees people's lives as influenced if not controlled by the power structures around them. In order to develop as a human being it is necessary to have an understanding of these structures in order to operate within and around them and to confront and seek to change them when necessary. The word "conscientisation" is usually used to describe this. To build on the previous analogy there may be little point in teaching a person to fish if fish stocks are being depleted by factory trawlers or industrial pollution or if it is impossible to gain access to fishing waters. From this perspective, it is important that people learn to analyse the world in which they live as well as the alphabet.

With regards to literacy work, most people agree that learning the basic tools of literacy and numeracy are important. (Although some of the more extreme proponents of Freire's philosophy seemed to spend more time encouraging people to read the world more than the word with the result that their students were highly political but alphabetically illiterate.) Assessing literacy and numeracy is then an important part of assessing the quality of literacy work. However, we have already seen that literacy and numeracy by themselves may not change people's lives. Therefore, any assessment of literacy work should also include an assessment of the use to which people have put their newly acquired skills and the resulting changes in their lives.

Helen Abadzi (1994: 6), in her World Bank Discussion paper, uses an analogy which might illustrate this. Abadzi likens learning literacy to learning to fly in a world where most other people can fly but you have never learnt this skill. The point she makes is that if you endlessly do exercises such as flapping your arm around, but after many months of such practice still don't actually fly, then you start to wonder if the benefit is worth the effort. This is a point about learning methodology:- if in literacy classes all learners initially do is to learn the alphabet they may rapidly become disillusioned. However, the analogy can be taken further. Suppose you learn to fly but never travel anywhere, you never use your new found skill to explore new places, to develop new business opportunities and to meet old and new friends, one must ask is there really a point in helping people to learn how to fly? Likewise, if people become literate but do not change in any way is there a purpose in such work? It has already been concluded from our examination of development that it seeks to facilitate a whole host of changes that enable people to "realise the potential of human personality". Therefore, any assessment of literacy as a part of development must also examine these aspects.

For literacy work to be of high quality there are other attributes which are important which relate to the planning and management of the work. There are at least three dimensions to this which should be examined:

1. *Cost effectiveness*: this is simply the cost involved in enabling someone to become literate and numerate. The lower the cost, *ceteris paribus*, the more efficient is such work.
2. *Sustainability*: there are three dimensions to this. Firstly, the sustainability of the learner as a literate person. Secondly, the sustainability of the literacy work with its methods and ways of working. Thirdly the sustainability of the organisation or project which is enabling people to become literate.
3. *Replicability*: this is an attribute that is mostly of interest to educational planners and managers rather than to learners. It has two main dimensions. Firstly there is "national" replicability, this is the ease with which a method and programme of work can be replicated from one village or group

to another. Secondly there is "international" replicability, this is the ease with which a method and programme can be adapted and replicated from one country to another.

Wagner (1995: 352) evaluates programme management by dividing it into seven elements as follows:

- planning and strategies for literacy work
- programme implementation
- student monitoring
- attendance and retention
- skill acquisition
- integration with other agencies
- post-literacy activities

While these are useful categories, it should be born in mind that the ultimate evaluation of literacy work is the resultant outcomes. Aspects such as student monitoring and attendance may be useful diagnostic tools with which to improve outcomes but are not a substitute for them.

In conclusion, it has been noted in this chapter that literacy is a continuum. That its assessment means setting boundaries of which the UNESCO ones are the most widely recognised. Assessing literacy work also means assessing some of the aims of literacy acquisition. Finally assessing literacy programmes should additionally include the elements of cost effectiveness, sustainability and replicability.

3. Types of development organisations

The state and development

International development activity, as opposed to colonial administration, began after the last war in the 50's and 60's. The challenge was seen as helping the governments of newly independent countries to increase the wealth and standard of living of their citizens and so to reduce, and ultimately abolish, poverty.

The state was viewed as the main player in this process. In the west, the "post war orthodoxy" revolved around Keynesian economics with its strong emphasis on the role of the state in macro economic management. The state took a pivotal role in managing demand in the economy through government expenditure and, where necessary, by increasing investment in state owned enterprises. In developing countries, many governments were impressed with the advances that had been made in the Soviet Union. In the space of thirty to forty years, an almost medieval economy had been transformed into a leading industrial nation. This had been done using the power of the state combined with central planning.

In this context, it was not surprising that the state was seen as the main agent of development. By the use of national planning, mainly aimed at capital accumulation, it was hoped that countries would be able to achieve in one generation, what had taken a couple of hundred years in the west.

Immediately after the last war the Bretton Woods, institutions such as the World Bank, the IMF and the different United Nations organisations were established. These trans-national organisations (TNOs) are financed by subscription from member governments and have performed various roles in development, largely carried out in conjunction with host governments.

However, during the 70's difficulties appeared with the post war orthodoxy. Throughout the world inflation rates started to rise. In the West reaching 20-30% while in the some developing countries reaching levels in excess of hundreds of percent. Much of this was due to the state financing its ever increasing spending by printing more money and so reducing its value. At the same time unemployment was rising, something that economists had not previously thought possible. This gave birth to the "vertical Phillips curve", "rational expectations" and "monetarism". The neo-classical counter-revolution was born. At the same time in the developing world it was increasingly realised that state control of large sectors of the economy was not yielding the hoped for benefits. Not only was wealth not being created as quickly as envisaged but in addition a "dual economy" emerged with a

tiny elite controlling most of the wealth while the vast majority lived in poverty. The counter-revolutionaries again blamed the state for this.

Rolling back the frontiers of the state. An expanding private and voluntary sector

Korten (1990) uses Nefin's analysis in arguing that there are three essential components of any society. The Prince (state), the Merchant (business) and the Citizen. Each has a different role and characteristic.

The government serves the interest of the people in its jurisdiction - all governments proclaim this, at least in their rhetoric. Governments use threat power, derived from their ability to exercise legitimate coercion. They are able to enforce taxation and so are the most natural providers of public goods such as defence and security. Furthermore, they are the obvious providers of merit goods such as education, health care and infrastructure. In providing these they are often responsive to the perceived needs of those who possess political power - characterised by Mackintosh (1992) as "private interest theory". Governments can additionally insulate themselves from market forces. They therefore tend to be inefficient in the production of goods and services in comparison to the business sector. As governments cater for a diverse constituency, they are often less innovative than the business or voluntary sector.

The business sector specialises in economic power. The more successful businesses are highly responsive to their customers. They can be "not for profit" which Korten (1990) characterises as Public Service Contractors (PSCs).

The voluntary sector is the domain of the citizen. It specialises in integrative power. It appeals to shared values and a vision of a better future.

All three of these sectors are essential for a dynamic self-sustaining development process. No government can do it all. Wealth creation needs an entrepreneurial spirit and so is best performed by the market and business, which can reward risk-taking and adjust supply to consumer demand. Creativity, innovation and self-direction are best carried out by the voluntary sector. It is also most likely to generate "social energy". Voluntary organisations are able to define positions more clearly, press for innovative solutions and experiment in ways difficult for government.

The counter-revolution is characterised by Michael Lipton as "pricism" and "state minimalism" (Harrigan 1995). It has been highly critical of the state characterising it as providing "poor services to poor people" and "doing much of what it shouldn't do and much of what it should do badly" (Toye

1989). The debt crisis of the 80's put an end to an ever-expanding state in most developing countries. International assistance through the IMF and World Bank carried conditions which meant that governments could no longer finance their activities by printing money or borrowing. In most cases conditionality went further and demanded the selling off of state enterprises thus "rolling back the frontiers of the state".

Korten (1990) argues that just as the frontiers of the state have being rolled back for the business sector it is equally important that the state is pushed back for the voluntary sector to expand. Exactly what should be state sector and voluntary sector territory is debatable. As has been noted the characteristics of public goods with their associated "free-rider problem" means few would deny the state a role in their provision. Many would argue that merit goods, which would be underprovided if left to the market, are also best provided by the state. However, education and health care are also traditional voluntary sector territory. Furthermore, many argue there is a great need for innovation in the provision of these services. This is a characteristic most associated with the voluntary sector. It seems there is room for both players in this area and for fruitful partnerships to develop. Indeed this is already happening with the total spending of NGOs increasing from US\$ 2.8 billion in 1980 to US\$ 5.7 billion in 1993, at constant prices (OECD in Edwards and Hulme 1995: 3).

People's Organisations

Korten (1990) takes this analysis one stage further. He argues that besides the three sectors already noted there is a fourth sector "People's Organisations". The state, business and NGOs are all "third party" organisations. They exist to serve a third party outside themselves. Korten asserts that Peoples Organisations (POs) are "first party" organisations. They are membership organisations or mutual benefit associations. He argues that they have two further defining characteristics. Firstly, they have democratic structures, which give members authority over the organisations' leaders. Secondly, they are self-reliant in that their existence does not depend on outside initiative or funding.

Korten (1990) further asserts that POs are different from the other three sectors as they are able to make use of all three types of power: threat, economic and integrative. This makes them more complex to manage but gives them unusual strength when all three types of power are skilfully managed. An example would be the overthrow of socialist regimes in Eastern Europe. In POs, officers may contribute substantial time without compensation.

Uphoff (1995) argues that NGOs are not really the third sector after government and business but that People's Associations or Movements are. POs undertake voluntary self-help and collective action.

To Uphoff (1995), NGOs are in the private sector. While previously they are referred to as the "Private Voluntary Sector" in reality, they are private in that they are responsible to private trustees but few if any of their workers undertake voluntary work. He asserts they are service organisations dealing with clients and beneficiaries. Such people do not create the organisation and cannot hold it accountable in the way that members can. Clients and beneficiaries consume the service on a "take it or leave it" basis similar to that of customers.

Uphoff (1995:19) illustrates these distinctions with the example of hospitals. They can be:

- *Public sector*: administered by a local authority. Patients are citizens. If patients are not satisfied, they have redress through the courts or the ballot box.
- *Private*: run as a business to make a profit. Patients are customers and consumers. If they are dissatisfied, they can go to another hospital.
- *Charitable*: operates on a Not-for-profit basis - otherwise like a private hospital. It will give free care or be less insistent about payment. If patients are dissatisfied, they have little redress but to go elsewhere.
- *Co-operative*: set up by the members with their own capital. They establish rules and fees. If they are dissatisfied, they are in a better position to exert corrective action.

Non-Government Organisations, People's Organisations and Public Service Contractors

The argument for seeing NGOs as more akin to business is easy to appreciate. Indeed, the lines distinguishing POs, NGOs and the private sector as exemplified by Public Service Contractors (PSCs) are blurred rather than sharp. Certainly many NGOs, especially as they become larger, can be seen more as businesses. Many will talk of providing a service to their "clients", of ensuring "quality" and of meeting "performance targets" in the way any large business would. Whereas twenty years ago the gurus of many NGO workers might have been Freire or Alinsky now they are more likely to be Peters, Weatherman and Blanchard. Such authors write about business and management with the majority of their work being related to the For-profit sector. This is not to say that there is anything wrong with efficient and effective management. Indeed, in a world of scarce resources the voluntary sector should be as aware of the need for the efficient use of scarce resources as any other sector. However, the voluntary sector must also be able to generate a "vision" for its work. Without this, it is really a PSC.

This is recognised by Korten (1990). He argues that many NGOs are in fact PSCs and that many NGO managers are aware of this and ill at ease with it. The closer an NGO aligns its self to the needs of its donors and the more it is interested in market share, the more it becomes characteristic of a PSC. Conversely the clearer it is as to its distinctive nature and mission the more likely it will be to resist the

pressure from donors to become a PSC. Such pressure tends to draw Voluntary Organisations (VOs) away from their role as a catalyst into a maintenance role. The temptation for VOs to become PSCs can be great and is understandable. With such a change comes greater short-run, financial and job security. Furthermore with the strain of fighting established interests, values and practices, as well as the difficulty of maintaining values, consensus and commitment can all diminish.

Whether we choose to see NGOs as a part of the second sector with POs as the third sector, or if we see NGOs distinctively as the third sector with POs as a fourth sector is a matter of choice. Some NGOs will be little different from PSCs, while others may be very close to POs. Some may be mixtures of both. What is probably most important is where ownership and control rests. The more it is with the members of the organisation the more it is a PO. Such an organisation is a better vehicle for "development from within" or "autonomous development" (see Carmen 1996). The less it is with these people the more the organisation is a third party organisation rather than a PO where "beneficiaries" can consume a product or service. In this area it should be realised that institutions change along a spectrum to meet changing realities which reflect fluid situations.

Uphoff makes one other important comment on organisations. Quoting the Swiss Sociologist Robert Michels who writing in 1915 said, "who says organisation says oligarchy" predicts that it is the "fate of organisations generally to become dominated by a self-perpetuating and self-serving leadership". This became known as 'the iron law of oligarchy' (Uphoff 1995: 20).

Furthermore, Uphoff argues that organisations that have low status members with little education and pervasive poverty are more vulnerable to the domination of their leaders. Unless we can refute the 'iron law' the more we try to make NGOs accountable to Grass-Roots Organisations (GROs) whose leaders themselves are least likely to be accountable to the people they represent, "the more benefits may be skimmed off for persons in leadership positions or for those whom they favour" (Uphoff 1995: 22).

Yet Uphoff continues by showing how at Gal Oya in Sri Lanka dedicated young organisers 'catalysed' in such a way that "farmers insisted that they could not have established this new system of organisation by themselves. But with some encouragement and appropriate organisation they made the new organisations their own..." (Uphoff 1995: 23).

Development organisations in Bangladesh

The government and NGOs started in the field of development work shortly after the war of liberation in 1971. According to Karim (1995: 112), their work has shifted from relief and welfare provision, to

small scale self-reliant work building up people's capacity to developing strategies for achieving change in policy at different levels of society.

All NGOs must now be registered with the NGO Affairs Bureau (NAB) if they are to receive assistance from outside the country. The number of such NGOs had grown to over 800 by 1994 (Karim 1995: 112). In addition to this, there are thousands of national and local NGOs through which many of the international NGOs work. Such organisations are much closer to the people they work with. Some may even be controlled by them and could be referred to as Grass-Roots Organisations (GROs). The flow of funds to NGOs as a percentage of all aid to Bangladesh has risen from 5.7% in 1988-9 to 11.93% in 1992-3 (Hashemi 1995: 108).

The growth of some NGOs in Bangladesh has also been astonishing. BRAC (Bangladesh Rural Advancement Committee) is the largest and one of the best known. It has a staff of 14,000 and whilst having made a switch from 'conscientisation' to 'service-delivery' (Edwards and Hulme 1995: 7-8) it still runs many innovative programmes. It currently receives more aid from the EU than does the government of Bangladesh.

However, the growth of such NGOs has been viewed with some concern in some parts of Bangladesh. In 1992 NAP sent a report to the Prime Minister's office accusing leading NGOs of being too donor dependant and spending money on high salaries and luxuries which resulted in high administrative costs. While much of this was not true and 76% of NGOs in Bangladesh keep administrative costs below 15% of project expenditure (Karim 1995: 115) "Some larger NGOs with their fleets of air-conditioned four-wheel drive vehicles and plush offices, were easy targets for accusations of lavish lifestyles, particularly since such 'luxuries' are antithetical to the spirit of service that people in South Asia historically associate with organisations working with the poor" (Hashemi 1995: 104-5).

Could it be that Michels warning "who says organisation says oligarchy" rings true in Bangladesh?

In this context, it is not surprising that there are signs of a growing interest in POs in Bangladesh:

"What NGOs should begin to do immediately is to build further the capacity of People's Organisations (POs) to enable them to take greater charge of their own development, so that PO's who 'graduate' can provide further support to NGOs by paying for the various forms of assistance they need." (Karim 1995: 117)

"Only by becoming organisations of the poor can NGOs truly prepare for a sustained struggle for empowerment . This implies that NGOs have to make a choice: between the four-wheel drive vehicle that comes with government licensing and the much harder conditions involved in living alongside poor people (Hashemi 1995: 110).

4. Testing literacy and numeracy and assessing its effects

Using Ziegahn's test

The tests described by Ziegahn (1992) were taken as a starting point for this research. These were devised for a survey of literacy in Lesotho. They appear in outline, with slight modifications as was felt appropriate, in annex 1. The material for test to be used in Bangladesh was compiled and prepared during the course of a week spent by the author with the assistance of a member of the Nijera Shikhi staff who also translated it into Bangla. A scoring system and score sheet was also devised together with a record sheet for recording brief socio-economic data. During this time an interpreter was hired who holds a Master's degree in commerce from the University of Dhaka. Additionally contact was made with Professor Md. Shahjahan Mian Tapan, Professor of Education at the Institute of Education and Research and with Dr. Kamrunnesa Begum of the same institute who with her colleague Dr. Halima Khatun had previously carried out a review of the progress of Nijera Shikhi for OXFAM (Khatun and Begum 1995). Dr. Begum was briefly consulted about her research work with Nijera Shikhi and briefly advised on research methodology.

The test was taken for trials to the Kaloroa Thana in the Satkira district in South West Bangladesh, close to the border with India (see map in annex 10). This area was selected at random by the author. The test team comprised of the author, Mr Mehbub-Al-Hassan who was employed as the interpreter and Mr Ashok Kar, the Public Relations Officer for Nijera Shikhi. Kaloroa is the administrative centre for the Thana and is a small town. From Kaloroa we first visited Ramavaddrapur on July 7th and Parikhupee and Elishpur on July 8th. Ramavaddrapur is about 10 Km from Kaloroa and takes over an hour to travel there by "van rickshaw" along lanes and tracks. Parikhupee is about 5 Km from Kaloroa most of this being on a sealed road. Elishpur is another 7 Km along the road. Again we travelled by van rickshaw. On both occasions we were accompanied by Mrs Rena who is an officer in a local NGO which promotes and uses Nijera Shikhi and by Mr Shajahan who is an Assistant Programme Officer with Nijera Shikhi and is based in Kaloroa.

We arrived at Ramavaddrapur at 4.45 p.m. After brief introductions and explanations, Ashok and Mehbub started testing. It took one and a half hours to test six people, an average of thirty minutes per test. In observing the testing it became apparent that modifications were needed. To test a whole class of twenty people would take ten hours of continuous testing by a single person. This is clearly too long and impractical. In addition to this, it was obvious that the test was causing this first group little difficulty. Members of the group whose literacy and numeracy skills seemed weaker were still scoring highly but working through the test at a slower pace.

It should also be realised that the test developed by Ziegahn and her team was designed to be used in an assessment of national literacy by examining the literacy levels of a random sample of 1,500 people. This is a different task from assessing the literacy of a group of people who, having completed a literacy course, are supposed to be functionally literate. Ziegahn's test was designed to classify people as illiterate, literate or functionally literate as defined by UNESCO and previously described on page **Error! Bookmark not defined.**. The research in Bangladesh only needed to test for functional literacy.

A review of the literature has revealed an absence of published work on post-literacy testing. It could be that if such work is to be carried out a test is needed which enables two or three testers to test a group of twenty students in two hours. Furthermore, during the trial test it was felt that it would be advantageous to give helpers and teachers a role in the testing. While there is a risk that such testers might not be quite as objective in their administration of the test, it could also be that the testing as a whole would become more objective by giving responsibility to these people rather than trying to ensure that they resist the natural temptation to help the students.

It was therefore decided to make some substantial changes to the test. This was done on the spot after the first six people had been tested at Ramavaddrapur and then further modified after discussion the following morning with Ashok and Mehubub who had both administered the test. This modified test was then re-trialled at Parikhupee and Elishupur where it proved to be satisfactory.

The modified test

Upon returning to Dhaka, multiple copies of the test were produced. These were laminated and placed in a ring binder for protection and ease of use in damp conditions. A copy of this, together with an English translation, can be found in annex 8. The modified version of the test was therefore as follows:

Table 1 Modified version of Ziegahan's test to test for functional literacy

1. Writing test

Q	Description	Procedure	Max. score
1	Fill in a simple loan application form	Go to 2	6
2	Take from dictation three short sentences each slightly more difficult	Go to 3	9 3 per snt
3	Write a simple letter to a friend saying that you will visit next month and send Tk 100.	Go to reading test	10
	Max. score		25

2. Reading and understanding test

Q	Description	Procedure	Max. score
1	Read a letter and answer 3 comprehension questions	Go to 2	9
2	Read instructions from a saline packet and answer 3 comprehension questions	Go to 3	9
3	Read three sentences from a standard 4 reader (p.61)	Go to numeracy test	7
	Maximum score		25

3. Numeracy test

Q	Description	Procedure	Max. Score
1	Ask the testee to count out allowed from 79 to 108	Go to 2	2
2	Reading 4 prices from a card	Go to 3	4
3	Take 4 numbers from dictation	Go to 4	4
4	4 Arithmetic questions for the 4 functions set in an agricultural or commercial context. Done on paper or in head	Finish	10
9	Max. Score		20

To be classified as functionally literate a person needed to score 17/25 in the writing test and 17/25 in the reading and understanding test. To be classified as functionally numerate they needed to score 17/20 in the numeracy test. Obviously such a test is not designed to determine the level of literacy attained or the amount of learning gained from the subjects covered during the course. It is a simply a test to determine functional literacy.

The writing test was administered first, as everyone in the group could do this at the same time. In addition to completing the loan form, students also provided additional socio-economic data. The reading and understanding test and the numeracy test were administered individually as this involved individual questions and answers. Where appropriate different material of the same standard was substituted to reduce biases gained from knowledge from previous testees. In the reading and understanding and the numeracy tests the performance of the testee was assessed immediately by the tester. In the writing test it was assessed a day or two later by the interpreter.

Interviewing neo-literates

As previously mentioned (page **Error! Bookmark not defined.**) literacy and numeracy are only technical skills. The aim of literacy work is to enable people to bring about desired changes in their lives. In order to assess this aspect people were interviewed, through an interpreter, using semi-

structured interviews. After experimenting with different numbers, it was found that interviewing people in pairs seemed to work best. Each interview tended to last between thirty and forty minutes.

In all a total of forty nine interviews of learners were conducted in eight different places. The intention being to gather information from a random cross section of around a third of any particular group. A total of nine helpers were interviewed and three organisers. Approximately fourteen hours was spent interviewing learners and four hours spent interviewing helpers and organisers. Usually respondents were asked "open" questions such as "what changes have occurred in your lives as a result of becoming literate and numerate". A mixture of closed and open questions would be used to follow up initial responses. Written notes were taken during the course of the interview.

The main themes to be explored were:

- How do the learners now use their literacy and numeracy skills?
- What changes have occurred in their everyday lives as a result of participating in the classes?
- Assessing any changes in income that have occurred.
- Any suggestions for improving the course.
- Checking the andragogic (teaching and learning with adults) methods used.
- Anything else they wished to say.

This aspect of the research proved highly successful and immediately yielded significant data.

Main testing and interviewing

This was done in the Tarash thana in the Sirajganj district. This area was chosen as it was the only one where Nijera Shikhi had groups who had completed their course at least twelve months previously and where travel to the area was not prevented by floods - although it took two attempts to get there. Tarash is a low lying area so much of it is flooded during the monsoon season. This meant travelling by boat to three of the five groups visited. With one of these groups the journey took two hours with the team arriving back after midnight only to start at 5.40 the next morning to visit another group.

There are 450 Nijera Shikhi groups operating in the Tarash area. Four had been selected for the testing before our arrival. However these had not all completed their course at least twelve months prior to the visit, therefore another four were selected. At least three of these had no previous notification of our visit. Kundaeeel, one of the original groups was still visited, interestingly this appeared to be one of the weaker groups.

On this occasion the team comprised of the author, the interpreter and Mr. Zahirul Alam Badal - a programme officer with Nijera Shikhi. The team was also accompanied by one or two of the staff from Kishan Jagorani Model Sangha a local NGO which uses Nijera Shikhi. These staff usually helped with the individual testing.

It was intended to test groups that had used ActionAid and government methods. Unfortunately, floods and an industrial strike prevented this.

Research methods and conditions

Interview and testing conditions were far from ideal. At times, it felt as if the whole village was listening to the questions and answers. It is not possible to avoid this except by taking a "tardis" into the village, which would be an equally artificial situation. However, it could be that the interviewers found the situation more intrusive than the interviewees did. People in villages are used to operating in public and the presence of observers is, if anything, likely to lead to more truthful responses.

Never the less, independent verification of data was sought where possible. Usually the helper was interviewed and asked about the changes that she or he had seen in the learners. At Lalamagira, the village had become a tiny island surrounded by flood water so it was easy to walk around and seek further verification. We asked to see the chickens of Fahima (who was one of the interviewees) and were shown the same number she had talked about. Ducks couldn't be seen as they were out foraging on the water, which surrounded the village. At one point, some geese were seen swimming by and after further enquiry it was ascertained that they were Hafeeza's. There were twelve of them - the number Hafeeza had previously mentioned. She was subsequently photographed with ten of these.

It should also be noted that with Nijera Shikhi all work is voluntary so there is no real incentive for people to bias their answers either way. When there are such incentives dysfunctional behaviour can easily occur. For instance, the evaluation of the Mass Literacy Movement in Lalmonirhat records that this "voluntary" scheme, which didn't pay an honorarium to the teachers, promised "gift money" to the teachers whose centres could show a maximum number of successful students based on students successfully completing a final test. This resulted in literate people, who had not attended the classes, masquerading as the real learners and "Numerous answer scripts were found which were written by the same person" (Ahmed 1996: 76).

In short, while there is no such thing as "objective research" the research team was aware of possible biases and sought to minimise these when ever possible. The perspectives gained from this research are likely to be as valid as any others are.

Contrary to advice and expectation it was easier to work with the women than the men. There was not the extreme reluctance to speak as might have been predicted. I had been warned that "in our culture women are very shy and will not talk easily with you, you will have to be very patient" (numerous personal communications). Apart from one occasion, when talking to people near the start of their course, this just was not the case. The fact that women's groups met in the day whereas the men's groups met in the evening also meant that the research with the women was easier. With the men we operated around inadequate kerosene lanterns, struggled with failing torch batteries and peered at faces glowing out of the gloom while with the women we could easily see each other. With the men one had to contend with anxious boatmen and rickshaw cyclists aware of the clouds building up, the lightning flashing and the one or two hour journey back to our base at a time when local bandits and the *bhut* could be at their most prevalent (see Gardener 1991: p.82ff) whereas with the women there was a more relaxed atmosphere. The men must also have found the small print on the saline packet used as a part of the reading and understanding test harder to read in the poor light.

5. Nijera Shikhi

The aim of Nijera Shikhi is to remove illiteracy from Bangladesh through local initiative. The use of local initiative is important to Nijera Shikhi, which means "let's teach ourselves". It is through this that further learning and change can occur in people's lives, additional skills can be developed and further awareness created.

Method of Operation

Nijera Shikhi continually publicises the services that it offers in any way it can. It uses national radio where short playlets are regularly performed. National and local papers also carry adverts free of charge.

The message in the publicity is a simple one. It appeals to people to join the movement to make Bangladesh free from illiteracy. If they want to help this movement they should write to Nijera Shikhi which will help them as a "people's service centre".

When people write to Nijera Shikhi they are sent an information pack. Nijera Shikhi distributes between 300 and 500 information packs per month. This tells enquirers what they can do in their locality and how to do it. People have three options for helping:

1. *Organisers*: they should do this if they can find 100 people who would like to become literate in their area. About 70% of the respondents choose this option.
2. *Independent teachers*: they should do this if they can only find 20 people who wish to become literate. About 10% of respondents choose this option.
3. *Child education promoters*: this will mean working to help to improve local primary education. About 20% of respondents choose this option.

Those who join have to complete a registration form and pay a small fee of around Tk. 25 (35p). About 70% of those who are sent the information pack subsequently join. Once they have registered, they receive the appropriate guide book on how to set about their work. If they live in an isolated place they need to read the book themselves in order to be self-trained for their role. In areas where there are fifteen or more new organisers, Nijera Shikhi will hold a three day training course.

The first job of the organiser is to get money together for the course. The total cost of educating a Nijera Shikhi learner is Tk. 85. Of this, Tk 35 has to be raised locally from the learners, village sources or the organiser and helper. This is used to provide learning materials such as a blackboard, slates and kerosene for lanterns if the class is to meet at night time. Nijera Shikhi raises the remaining Tk 50 per learner. This covers the cost of providing all the primers, guides and mini-libraries together with Nijera Shikhi's travel, staff and administration costs (see budgets in annex 3).

At the same time as starting to raise this money, the organiser will target an area in which to work. They call a meeting and form a "Mass Education Committee" of people who are interested in working to make the area an "illiteracy free zone". There are usually between ten and twenty people on these committees. This way the work load is divided amongst the committee members and the ownership of the work rests more with the village.

The committee then works to get one hundred people who wish to become literate. Next, these people all meet together. If need be they talk about the advantages of becoming literate in order to motivate the learners.

The one hundred learners divide into five groups of twenty. Each group chooses one or else two persons who they will approach to help them to become literate and numerate. In choosing a person the group is advised to look for qualities such as: an "interest in people", "their presentation capacity", "their attitude to people" and "their level of education". When the group has decided on the person they would like, the whole group approaches that person and asks for their help to become literate and numerate.

Nijera Shikhi is not aware of anyone having ever refused such a request. Occasionally a helper stops doing the work because of moving due to marriage or to start a new job. In one instance the helper died. However when this has occurred the class has not stopped as a replacement has been found. Nijera Shikhi recommends two helpers per class of twenty but one is the minimum.

The organisers then train the helpers in the self-education method of Nijera Shikhi. This method means the helpers are not teachers but they help the learners to learn themselves by discovery and by building on their existing knowledge. Nijera Shikhi works on the principle that writing comes before reading. In the first lesson the learners will learn to write a sentence "Kaka Taka chai" - "Uncle, we need money". The letters that go to make up these words are collected together from every day objects that the learner will be familiar with. Taka is printed on a bank note. This word employs three letters. Kaka can be worked out from Taka and the remaining letters can be found on a packet of tea and the picture of a brick. At the end of the first lesson people are able to write a sentence - in fact a useful letter - as well as learning to write and read five characters. Having been one of a group of students at Manchester University who, although having no knowledge of Bangla, were able to learn to write this sentence in twenty minutes, it could be seen how this can be a highly effective learning method. Learners are active in their learning and immediately have a great sense of achievement. In subsequent lessons more characters are added in a similar way until all fifty letters of the Bangla alphabet, and most of the one hundred and fifty combination letters, have been covered together with the numbers.

The classes usually meet for two hours per day for six days a week. The whole course takes about twelve months in three stages.

57% of the people who join Nijera Shikhi classes are women and girls. This figure directly reflects the gender balance of illiteracy in Bangladesh.

Stage one: This is for two to three months and uses the primer "Jai Chai". This is different from traditional primers as learners write to it rather than read from it. At the end of the first stage learners will be familiar with the alphabet and with numbers and be able to write and read simple sentences.

At the end of stage one there is a test. A list of those members who have passed this stage is sent to Nijera Shikhi who then sends the materials for stage two. This list also enables Nijera Shikhi to monitor its effectiveness. Usually between fifteen and twenty of the twenty that start the course successfully complete stage one, with the average being seventeen or eighteen.

Stage two: This stage lasts three to six months and has three aims:

1. To increase the literacy and numeracy of the learners.
2. To form savings groups - about 50% of the groups do this, saving Tk 5 per week.
3. To receive different kinds of training. This is done by inviting trainers from the locality to help the group. Agriculture, family planning, health and co-operative development officers are among the people who give talks and demonstrations to the group.

As a part of this stage the learners will also make and look at posters to improve their visual literacy and will start some creative writing of their own stories songs and poems. Furthermore, the learners start a "development group" which looks at ways they can develop their lives and community. This group should continue after the end of the Nijera Shikhi programme.

At the end of stage two there is a further test. Virtually everyone who starts stage two successfully completes it.

At the end of stage two each learner gets a certificate from Nijera Shikhi which will usually be presented in a locally organised graduation ceremony. Each helper also receives a certificate from Nijera Shikhi, which says "This woman (or man) enabled me to become literate and numerate": it is signed by all of the learners.

Stage three: This is the Continuing Education stage and lasts a further six months. Here the group meets to continue their education. The aim is to help the learners acquire the habit of reading and writing. They use books from the mini-libraries, which Nijera Shikhi provides, together with any other useful material which is accessible. From this material a small group will choose one book. One person in the group will read this book to the other members of the group. If the reader comes across words or passages they find difficult, the other members of the group help her or him and together they try to work out what it means. The helper can also be approached. Usually the group will discuss what has been read, and will go away and discuss it with family and friends.

The mini-library is provided by Nijera Shikhi in places where there are between eighty and one hundred neo-literates. It is comprised of a tin box containing sixty-one books on various development related themes. It is available for the whole village to use and add to. The initial cost of the mini-library is Tk 1500 which, is met by Nijera Shikhi. The mini-library is organised and maintained by the local "committee for mass education".

Union based movement

In addition to the normal organiser-based way of operating, Nijera Shikhi has created a Union-based movement.

Bangladesh is divided into 4,443 rural Unions with some additional urban Wards or municipalities. Nijera Shikhi writes to each Union chairperson asking them to work with Nijera Shikhi to make their Union an illiteracy free zone. As at the middle of July 1997, 160 Unions have responded positively to this call with two of these being urban wards.

The average population of a Union is about 28,000 of whom, some 12,000 will be illiterate. Once a Union chairman contacts Nijera Shikhi, a programme officer visits the chairperson to explain further how Nijera Shikhi works and to plan with the Union how it will become literate within four years. Each Union has nine officers who are responsible for an area in the Union. These officers need to recruit a total of thirty organisers. Their names are then forwarded to Nijera Shikhi who send the organisers' manual to them. Two weeks later the Nijera Shikhi programme staff run a three-day workshop for the organisers.

The programme then works in a similar way to the organiser-based method except every Union will additionally have a co-ordinator who is not the Union chairperson. Each Union has a small amount of money available for social welfare and adult education and it may use this to help fund the Tk 35 per learner that Nijera Shikhi provided locally for learning materials. It can also seek additional help from the DCOs.

Management systems

Nijera Shikhi has developed a highly effective, low cost management information and business administration system. Once an organiser has recruited the one hundred learners and they have chosen their helpers, he or she sends to Nijera Shikhi a list of the five classes, giving the name and address of the learners and centres as follows:

Name	Age	Father/Husband's Name	Village	Remarks
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This form is then signed and dated by the organiser and the helpers.

The organiser also completes a requisition form. This gives the village, part of the village, the name and address of the local newspaper and the name of the local MP. Nijera Shikhi then contacts the

local paper seeking publicity and support and informs the MP that a village in his or her constituency intends to eradicate illiteracy using the Nijera Shikhi method of working. Nijera Shikhi further asks the MP to help the Nijera Shikhi movement in the village in what ever way possible and asks for continued help in publicising Nijera Shikhi in the constituency. In addition to this, the form requires the organiser to give details of their provisional budget for each of the phases of the course for the locally provided learning materials. Finally, the names, times and days of the class, together with the number and names of the helpers, is recorded. There is also a space to requisition the appropriate number of first primers "Jai Chai" together with the helpers guide book and the guide-book for each of the lessons in "Jai Chai". Nijera Shikhi then dispatches these.

At the end of the first phase the organiser sends in another form similar to the first, but with only the names of those people who have passed the test at the end of phase one and who are expected to continue with phase two. This enables Nijera Shikhi to monitor the effectiveness of its work at this stage. There is additionally a form to requisition the appropriate number of second and third primers, and numeracy primers. The organisers also inform Nijera Shikhi of any problems they have encountered. At the end of the second phase, a form is sent giving the names of those learners who have passed phase two and requesting a mini-library for phase three. This again enables monitoring of the effectiveness of the second phase and triggers the sending of certificates and the mini-library if appropriate.

This system enables Nijera Shikhi to know at any time how many people have completed each phase of the course and how many people are enrolled as Nijera Shikhi learners but are waiting to start the course while their helpers are being trained.

At the time of enrolment, Nijera Shikhi insists to all organisers that a course excluding stages two or three will not be recognised as a Nijera Shikhi programme.

Development of materials and ways of working

All of the materials used by Nijera Shikhi and its andragogical methods were written and developed by John Hastings, a British citizen who has worked in literacy and community work in Bangladesh and India for over forty years. He is fluent in Bangla. All of the people I met in the classes whether they were learners, helpers or organisers commented on how effective the materials are and how they relate to people's everyday lives. The syllabus that the material covers is prescribed by the government's Department for Non-formal Education. These topics are listed in Annex 2.

Experience is showing that it is often difficult for the organisers to recruit the one hundred learners they need. It is easy to get one hundred people to the initial meeting but hard to convince them that this method of learning will be effective. However once classes start, and people see that it is

effective, other people become interested so that an organiser is often able to start more than five classes.

Nijera Shikhi does not always insist on the requirement of one hundred learners before they will supply a mini-library. In one area there were just two classes with a total of thirty five learners. They still requested a mini-library. One of the Nijera Shikhi staff visited the classes and found they were making very good progress so they were sent a mini-library on the understanding they would continue to start more classes and the mini-library would be for these learners as well.

Nijera Shikhi has found that it can take some time to mobilise the community's resources. It will take at least two and a half months from the time an organiser first contacts Nijera Shikhi to the time a class first starts, on occasion it has taken more than nine months. However, the time taken is the time appropriate for that particular community to embark on its own self-education programme.

6. ActionAid and REFLECT

Background and development of REFLECT

ActionAid is a UK based charity that operates in different parts of the world. It works mainly to improve the lives of the poorest and most vulnerable people in the countries in which it operates.

David Archer and Sara Cottingham from ActionAid started work on REFLECT in October 1993. REFLECT stands for Regenerated Freirean Literacy through Empowering Community Techniques. It seeks to use Participatory Rural Appraisal (PRA) techniques within adult literacy programmes.

In many ways the REFLECT method builds on the Freirean philosophy and androgogy combining this with Participatory Rural Appraisal (PRA). The reason that it was felt necessary to do this was that, whilst some practitioners of Freirean methods were producing astonishing results, many were also producing very poor results. It has already been noted that Helen Abadzi (1994) in her review of literacy programmes world-wide over the past thirty years, estimated that they had an average effectiveness of 12.5%. Examinations of current literacy methods were found often to use practices which Freire himself condemned but this time in his name! In 95% of cases, there was apparently no dialogue in literacy classes (Archer and Cottingham 1996a: 12). Most of the time in classroom situations, literacy teachers side-stepped dialogue and fell back on what they saw as the meat of teaching literacy, using simple exercises and rote learning. In many ways this is not too surprising as anyone knows who has tried to get a classroom discussion going only for it to be greeted with silence. As many adult literacy teachers are inexperienced volunteers and are working with people enveloped in “the culture of silence”, it is easy to see how dialogue fails to arise. In such situations teachers usually fall back on the methods by which they themselves were taught and so resort to mechanical, rote learning. Often primers used in this situation to stimulate dialogue still appear as outside and alien tools which only bring about embarrassed responses from learners anxious to get the answer right. Usually “There is no link to local issues, local development or social change. Learners feel ashamed, annoyed or simply bored. Many drop out and others struggle on but fail to learn because reading and writing is not meaningfully related to their lives” (Archer and Cottingham 1996a: 13).

In using PRA, REFLECT seeks to overcome these problems. PRA “has its roots in a reaction to the Western model or the “*modernisation*” approach to development. It is an approach to be used against those who believe that there are simple solutions to development which can be imposed by external professionals.” (Archer and Cottingham 1996a: 13) However, PRA is not just a set of techniques for extracting information. It is a whole approach that depends on real respect for people and a commitment to their priorities. What it does is enable educators to get alongside people, to understand

their world more and to start to enter into it. This means that education can start from where people are, which is the only place that true education can begin. As Fuglesang states “Western educationalists have been blind to the oldest and truest pedagogical rule: start with what the students know, not what you know” (Fuglesang 1982 in Archer and Cottingham 1996: 14).

The REFLECT method therefore starts by using PRA techniques. First of all participants make maps of their village. These are made by using sticks and stones, beans pieces of grass and what ever other suitable material is available. They are made on the dirt ground and will show all of the important features of the village such as houses, roads, public buildings, fields rivers, irrigation systems, catchment areas and so on. In addition to this, matrices of relationships are built up, and calendars of important events and happenings during the year such as planting time's harvests, rains and feasts are produced. This material is then used as the basis for the literacy materials and discussions, conversations or dialogues in classes. Local artists are used to draw pictures of things of significance in people's lives. These are then used to generate conversation. A laptop computer can be used to produce literacy material from the PRA experience although the ActionAid staff at the Jamalpur project at Dewangonj had never done this (personal communication, Salima Khatun, Education Co-ordinator, 20/7/97). This material is relevant to people's lives and opens up the possibility of dialogue on difficult issues. From this people's consciousness can be raised and they can be empowered to change their lives.

In addition REFLECT has tried to take on board the new concept of the “ideological approach to literacy”. In this the individual must be “an active actor in literacy learning - not just a passive recipient of an externally defined and introduced technique” (Caxton Report 1994 in Archer and Cottingham 1996a: 15). The methodology used has an emphasis on writing rather than the passive reading of fixed texts. It emphasises the creative and active involvement of participants. It builds on the existing knowledge of participants, respecting their oral traditions and other “*literacies*”. It focuses on learner generated material rather than pre-packaged texts. It ensures that the process is responsive to the local context and looks at “*literacy events*” in the wider environment rather than just as a classroom activity (Archer and Cottingham 1996a: 15). Integrating PRA into the work, so the learners can use the material generated as a basis for producing literacy material and discussion, can be an effective way of doing this.

REFLECT seeks to develop appropriate numeracy skills in the programme. This is done by carrying out a socio-mathematical survey to find out the numerical skills people have and those others which are needed. A programme for this is then incorporated into the classes.

The REFLECT programme seeks to tackle gender issues in a realistic and sensitive way. There are two main approaches to these in literacy work. The first approach is pragmatic. It supports women in their roles, helping them to perform them more efficiently and effectively. In this approach, literacy primers are likely to contain information on farming, nutrition or health. The second approach focuses more on the strategic needs of women. Reviewing traditional roles such as cooking and water collection. Looking at protection from domestic violence, ownership of assets such as land or money; the right of access/custody of their own children, inheritance, control over their own bodies. In this approach, literacy primers may give information on legal rights (Archers and Cottingham 1996a: 16-17). The REFLECT programme tries to combine both of these approaches. It seeks to support women with their practical needs while challenging some of the causes of these problems if the learners themselves wish to move onto this area.

REFLECT in Bangladesh

ActionAid started working in Bangladesh in 1982. According to its mission statement it is "committed to participating with the poor and vulnerable in their desire for self and societies development".

In Bangladesh it has the following programmes:

- savings and credit
- community health care
- non-formal education
- policy research and advocacy
- tube well installations
- latrine production and sales
- disability training
- partnerships with local NGOs (ActionAid Bangladesh)

The non-formal education work comprises solely of the REFLECT programme which is a combination of literacy work and social analysis. Its aim is to achieve greater literacy rates through empowerment with literacy (Personal Communication, Serajud Dahar Khan, REFLECT Training Co-ordinator, 16/7/97).

In Bangladesh ActionAid operates the REFLECT programme in seven development areas. In three of these it is done by direct operation by ActionAid while in the other four the work is implemented in partnership with local NGOs.

The work is co-ordinated in Bangladesh by the REFLECT Co-ordination Unit (RCU). It has a budget of £347,000 for all of the work for the 3 years over the period August 1995 to August 1998. Of this £72,000 is used over three years to run the RCU. This money comes from ActionAid UK and is funded by the British Government's Department for International Development (DFID). The unit cost per learner is calculated at Tk 800 in urban areas and Tk 700 in rural areas (see annex 4). However this figure is a marginal cost rather than an average total cost. It does not include the cost of running the RCU nor does it include ActionAid's UK costs associated with REFLECT nor the development cost of REFLECT. However the current output of learners is 6,433 per year (REFLECTions 1997) if this is taken as an average achievement over three years this would mean 19,299. At a total cost of £347,000 this is about £18.00, or Tk 1260 per learner.

Each learning circle starts off with twenty five participants and by the end of the course usually has around twenty participants. Two hundred circles have already been completed enabling around 4,000 people to become literate. ActionAid hopes for a 60% success rate in literacy and numeracy from each circle. In fact in the initial pilot project on Bhola Island a 65-67% success rate was achieved. In addition to this it was found that mothers who attended the circles started to send their children to school when previously they had not been concerned about doing so. Apparently each area produces its own newsletter for the neo-literates (Personal Communication, Serajud Dahar Khan, REFLECT Training Co-ordinator, 16/7/97). However when asked about post-literacy activity, ActionAid staff at Jamalpur made no mention of this, saying that the main post-literacy activity was "teaching their children", "reading children's books", "sometimes they take their children's story books and enjoy them" and "reading the newspaper" (personal communication Salima Khatun, Education Co-ordinator, 20/7/97).

In terms of the sustainability of the organisation this is entirely dependent on gaining donor funding. At the moment this means gaining funds from DFID. Discussions are currently being held with the Bangladesh Government's Directorate of Non-formal Education and it is hoped that they will be interested in using and funding the REFLECT method in future.

The REFLECT method will be sustained for as long as ActionAid can gain funding for this work or for as long as other NGOs are interested in using the method and are able to finance it. Ultimately this means that if NGOs which have available funds believe that REFLECT most suits their needs then it is likely to be sustained. At the moment the direct costs of Tk 500 per student are met by partner NGOs where REFLECT operates in this way. ActionAid meets the indirect costs of Tk 200 per learner (see budgets in annex 4).

In terms of sustaining the literacy of the neo-literates, post-literacy work continues after the basic literacy course. This starts with learner generated materials and a post-literacy course is planned. In Bhola thirty post-literacy centres are operating. As mentioned previously there may not be any formal post-literacy activity in Jamalpur. The initial course now lasts around nine months with post-literacy work supposed to last another 6-12 months.

The people who attend the circles are chosen by the local units which implement the programmes. It is intended to work with the poorest, most illiterate and most neglected members of the community. There is a particular emphasis on working with women.

In REFLECT the facilitators are recruited by a formal process of written examination and interview where their attitude, basic skills and understanding of empowerment are examined. The facilitators receive an honorarium of Tk 500-600 per month for their work. They receive an initial training of ten to twelve days from the locally based trainer. It takes ten to twelve days to train the local trainer. The training itself is a mixture of PRA, Freirean philosophy and associated andragogical techniques and how to interact and motivate the groups. Every fifteen days there is a workshop with the facilitators. This lasts for half a day one fortnight and a whole day the next. It is very rare for a facilitator to drop out. There is regular monitoring of the learning circles by both the RCU and the local project monitoring teams. This monitoring process is continually looking at indicators of success in both the literacy and numeracy and the empowerment dimensions of the programme.

For each project there is a local planning team composed of the REFLECT trainer, the chief executive of the local organisation, educational personnel and monitoring personnel. The local trainer who has been trained by the RCU carries out the orientation of the team. Background research of the area is then conducted looking at the literacy rates, where people live, and identifying the richer and poorer areas. The local REFLECT manual is subsequently developed and the facilitators are selected. They then often help in the research process. During this surveying the participants are also selected by a mixed strategy of suggesting this to them during the research phase and persuading them to join in. The time of the course is chosen and the participants are asked if they are happy with the facilitator who has been chosen. On two occasions at Jamalpur the learners rejected the facilitator. Occasionally the participants are chosen first and they help to select the facilitator.

REFLECT at Jamalpur

A visit was made to ActionAid, Jamalpur to their offices at Dewangonj on 20th July 1997. Unfortunately REFLECT activities had been suspended six days before this visit due to floods in the area. This meant leaving on the night train just thirteen hours after arriving. Therefore it was not possible to meet facilitators and learners as was intended. Data was gathered from conversations with

four or five of the staff but mainly from talking with Salima Khatun, Education Co-ordinator and Md. Saidul Islam, Monitoring and Evaluation Co-ordinator.

ActionAid, Jamalpur employs 102 staff, has offices in Dewangonj, a modest guest house, a fleet of motorbikes and a four wheel drive vehicle. The staff engage in a wide variety of development work of the kind previously listed, aimed at the poorest and most vulnerable members of the community. It has a long-term perspective to its work having been in Jamalpur since 1991 and plans to withdraw in 2003. Much of the work revolves around "shomtis" which are co-ops usually having between 15 and 25 members. ActionAid supports a total of 52 shomtis in Jamalpur. Shomti members are often involved with several of the ActionAid activities and are able to purchase items, such as latrines, at much lower prices. Participants in the REFLECT circles are almost always shomti members.

The following changes have been noticed by the staff in the circle members as a result of attending the circles:

- greater cleanliness
- family planning with members making action points of what they themselves need to do
- tree planting
- awareness of medical facilities and vaccination
- able to fill up pass books and keep household accounts and other accounts
- more self-confidence e.g. increased bargaining power with local chairmen and making them more accountable to them
- now try to use sanitary latrines
- increased sense of co-operation
- greater awareness of primary health care and reduced superstition over vaccinations
- ability to plan ahead e.g. selling poultry birds before the floods come. It is often impossible to keep them as the floods force migration.
- increased habit of saving - in one shomti two members have opened Deposit Pension Schemes (DPS) accounts
- more homestead gardening leading to increased nutrition.
- participants now realise the importance of education - attendance of their children at school has increased.

Staff felt that both elements of REFLECT were needed to bring this about and that it wouldn't occur if just the literacy or PRA work was done. It should also be noted that the other ActionAid activities would complement and re-inforce these changes.

A possible weakness was identified with REFLECT in that it was felt that the greater awareness gained by people can, in some cases, lead to dissatisfaction when they are not able to do anything about their situation. For example in many instances it is not possible to do anything when bargaining with rich people. In such situations they need legal support as well. Also, when they have an idea for income generation, they will often need assistance in gaining access to resources (personal communication, Md. Saidul Islam, Monitoring and Evaluation Co-ordinator, 20/7/97).

It is reckoned that it takes 3-4 months for the learners to gain familiarity with all of the alphabet and numbers. Usually it takes 4-5 days to make 25 new words and new sentences using these words. (personal communication, Salima Khatun, Education Co-ordinator, 20/7/97).

It is further estimated that 90% of the learners help their children with reading and writing. They are able to do this quite well when they are in classes 1 & 2 but with higher classes it is more a case of providing encouragement for them to go to school and to do their homework.

The education co-ordinator at Jamalpur was confident that circle members who had just completed the course would find the test for functional literacy and numeracy easy. She agreed that it would be interesting to see how they performed one year after completing the circle. She felt that if they had continued using their skills, they would still find it easy but they might not do very well if their skills had not been used. She kindly agreed to keep a copy of the test and to try and collect the data and forward it to the author via the RCU office in a month or two when it is expected that the floods would have subsided. It is hoped that this data will be forthcoming.

7. Government work in Literacy

Recent History

The Government of Bangladesh has, like many other governments, paid little attention to adult literacy work in recent years. The reasons for this are a matter of speculation. Perhaps the inevitable logic that if primary education is improved this will reduce and eventually eradicate illiteracy, combined with the absence of any data concerning the effectiveness and returns to adult literacy work, has led policy makers to concentrate on the formal school sector. There is a hint of this in the present policy document "If all the children of school going age did complete their primary level education and did not relapse into illiteracy then automatically there would be a society of 100% literates in due course" (NAP 1995: 47).

In 1980 a Mass Education Programme (MEP) was launched as a part of The Second Five Year Plan (1980-85). Its target was to literate 10 million people. However within two years the programme had only enabled 700,000 people to become literate and was abandoned following political changes (NAP 1995: 48). This programme cost Tk. 789 million - equivalent to Tk. 111.4 per person.

In the Third Five Year Plan (1985-90) there was a more modest target of making 2.4 million adults literate. However implementation delays meant that nothing approaching this was achieved. Systematic data of results was not gathered but theoretical calculations of possible achievements indicate that the government programme could have enabled 241,600 adults to become literate during this time (NAP 1995: 48).

Under the Fourth Five Year Plan (1990-95) it was envisaged that 420,800 adults would be made literate. Although the NAP published in 1995 commented that "...no detailed plan of action for this has yet been drawn up" (NAP 1995: 50). However in two districts a Total Literacy Movement (TLM) was run by the district. In one of these, Lalmonirhat, a detailed evaluation of its success was carried out indicating that 223,436 learners were enrolled with a probable success rate of 86% at the end of the course (Ahmed 1996: 61).

The government's history of planning and achievement in this field could therefore be described as "variable". This, however, should be put in a context of a country that is amongst the poorest in the world and which inevitably has many competing demands on its limited resources and faces an enormous problem. "With a 34.6% adult literacy rate, there were 40.3 million adults waiting to be literate in 1991 out of a total population of 61.6 million adults. The plan of action for adult education

would have to keep in view that the adult population of the age above 15 years would be 67.8 million in 1995 and 75.6 million in 2000.

Report by the Asian Development Bank

Within this context the government of Bangladesh "requested the Asian Development Bank (ADB) to prepare and finance a project (the project) which will assist the Government in achieving Education for All (EFA) by improving and expanding non-formal education (NFE) to reach illiterate young adults, particularly females" (ADB and IDA 1995: 1). With the World Bank's interest in co-financing an NFE project they also participated in the Appraisal Mission which took place from 7-26 April 1995.

The investigations which preceded this mission state that "programmes organised with community participation are likely to succeed" and "Replicability has been largely determined by their local success, cost and management" (ADB 1994: 20).

It also notes "that serious concern must be expressed about the effectiveness and internal efficiency of adult literacy programmes" (ibid.: 26) and that drop-out rates of 40% occur in male evening classes.

In addition it stated that "There would appear to be the need for the structure and methodologies of such programmes to be reviewed, and the development of more appropriate models. Continuing post-literacy support would also appear to be essential to such learners" (ibid.: 26).

The report goes on to state that for inexperienced NGOs it is best to contract to them at Government costs, materials, supervision and so on while with large and experienced NGOs it may be more effective to contract to them to provide their own programmes, materials, training and supervision to agreed standards in learner outcomes and at negotiated costs (ibid.: 58).

The need for flexibility is also emphasised "The NAP identified as a 'major constraint on the development of NFE, the overlooking of the potential of private and non-government initiatives, and past lukewarm support for NGO efforts" (ibid.: 58). The report goes on to comment that "Failure to involve a wide range of NGOs in policy formulation, co-ordination, planning and professional developments; that is failure to adopt a genuine partnership approach to NFE, is identified as a major project risk" (ibid.: 97).

Furthermore the mission noted that:

- clustered provision is often better than single provision

- the integration of literacy and income generation can lead to greater retention in adult learners
- a Total Literacy approach where a whole area is targeted can be very effective with an immediate increase in school attendance (ibid.: 69)
- skill retention, and the occurrence of high relapse without the opportunity to use skills, needs more research (ibid.: 97)

The current situation

The eventual outcome of the mission has been the establishment of a new project in non-formal education. This is largely financed by loans from the Asian Development Bank and the World Bank. It has three main components: establishing and building up the capacity of a Directorate for Non-formal Education (DNFE), Non-formal Primary Provision and Non-formal Adult Education (literacy, numeracy and life skills). This has meant that the previous government Integrated Non-formal Education Programme (INFEP) was closed in June 1997.

As far as Adult literacy and numeracy work is concerned the main current thrust is through the "NFE Project number 1". This is aimed at 15-24 year olds and has a target of literating 2.95 million people in five years. The work is to be done by NGOs within the following parameters:

- NGOs will receive a subvention of Tk 495 (US\$12) per learner.
- Courses are for 12 months - 9 months literacy and numeracy followed by 3 months post-literacy.
- Minimum of 50% of places for females.
- 30 learners per centre with one teacher per centre.
- Teachers must be female for female centres and visa versa.
- Classes will be for 2 hours per day, 6 days per week.
- For every 15 centres there is one supervisor.
- Teachers receive an honorarium of Tk 500 per month while supervisors receive an honorarium of Tk 1200 per month.
- Female classes must be in the day time.
- Government material and methods must be used.
- The NGOs will select supervisors, teachers and learners.
- Training to the teachers is given by the supervisors who are trained by a master trainer who is trained by the training unit.

(Personal communication, Moheni Mohan Chakrabarti, Project Director No 1 Project, 17/7/97).

The project is being implemented by NGOs in thirty districts in all six divisions. In addition to this there are two districts where literacy work is being organised by the district administration along the lines of the Total Literacy Movement, previously mentioned, which has already operated in two

districts. The unit cost of this mode of delivery is estimated at Tk 202 per learner. Initially a base-line survey is conducted to identify and locate the illiterates in order to fix the locations of the centres. No honorarium is given although a token payment may be made at the end of the course. These two schemes are to be run as pilot schemes and will be evaluated one year later to determine their success and to check that the previous success of the movement in Lalmonirhat was not simply due to a unique set of circumstances.

The DNFE is the implementing agent for the project. NGOs which are implementing the work are quite definitely performing the role of PSCs. The attractions and dangers of this have been previously outlined in Chapter 3. There is to be "intense monitoring" (personal communication, Chakrabarty, 17/7/97) of the NGOs by monitoring associates employed by the government. It has yet to be seen if the NGOs are able to operate a large number of centres and if the smaller NGOs have adequate infrastructure for the work. NGOs that are found to be ineffective will have their contract cancelled and will be black listed by the DNFE from taking up further contracts.

In addition to project number 1 it is intended that project number 2 will make 6 million people literate in five years and project number 3 will enable 0.6 million hard to reach urban children to become literate.

The target is to achieve a 62% literacy rate by the year 2,000.

It is interesting to observe that while the project has contracted implementation to NGOs in the way that the mission suggested as appropriate for inexperienced NGOs, it has not yet done so in the way suggested as appropriate for experienced NGOs (ADB 1994: 58) nor has it yet entered into the kind of genuine partnerships with NGOs which are identified as important by the mission (ibid.: 97).

8. The impact of Nijera Shikhi

There are two parts to the assessment of the impact of Nijera Shikhi. The first is the imparting of the technical skills of literacy and numeracy. The second is its ability to enable people to change their lives.

ASSESSMENT OF RETAINED FUNCTIONAL LITERACY

Five groups were visited in the Tarash area who had completed the third, post-literacy phase of their course at least twelve months prior to the test date. In fact four of these groups had completed the course eighteen months prior to the test date. Three were female groups and two were male.

As has already been described, in chapter 4, the test was based on one devised by Ziegahn with the simple questions removed to test only for functional literacy and to speed up the process.

The full results together with the aggregated summary given below appears in annex 5

Table 2 Summary of results of tests for functional literacy of Nijera Shiki neo-literates

Place	Bin	Moh	Pen	Kun	Lal	Total
Gender of group	M	M	F	F	F	
Months since course completed	18	18	18	12	18	
Number of students who started	20	20	20	20	20	100
Number of students who finished	16	16	12	13	18	75
Number of students tested	14	16	10	7	15	62
Number tested who were functionally literate	14	15	10	5	12	56
Number tested who were functionally numerate	14	16	10	5	11	56
Number tested functionally literate and numerate	14	15	10	5	10	54
Estimate of number functionally literate and numerate	16	15	12	15	15	73

The percentage of neo-literates tested who were functionally literate and numerate was:

$$\frac{\text{number tested functionally literate and numerate}}{\text{number tested}} = \frac{54}{62} \times 100 = 87\%$$

The estimate of the number functionally literate and numerate takes account of those not tested but estimated as functionally literate and numerate by the teacher and of those who just fell below the borderline in one section of the test but whose overall marks were good and who are probably functionally literate and numerate.

CHANGES IN PEOPLE'S LIVES

Terminology

It has already been noted (page **Error! Bookmark not defined.**) that the acquisition of literacy and numeracy is a means rather than an end. Literacy and numeracy acquisition serves no purpose unless people's lives are enriched as a result of their newly acquired skills and the changes these can bring. Many writers refer to this as "empowerment" (see Archer and Cottingham 1996b p.52ff). However this verb is in the transitive. "I" empower "you". There is almost an implication that you will be "empowered" whether you like it or not! By way of illustration the ActionAid staff at Dewanganj informed me on my arrival that all the ActionAid work there had been suspended six days previously: all staff were now at Dewanganj for "consciousness raising". One could almost envisage staff having their consciousness raised whether they liked it or not! This research therefore focused on "changes" that have occurred in people's lives as a result of their literacy and numeracy acquisition.

Changes of significance

Research was carried out as described in chapter 4. The nature of the interview was such that attempts were made to explore in greater depth some of the changes that people mentioned as well as seeking to verify the accuracy of their statements rather than producing whole lists of possible items to which they could respond. In addition to this, when noting information might have interrupted the flow of the interview, new changes and ideas were noted rather than recording accurately the frequency of particular items. Some of the changes mentioned by people were as follows:

Table 3 List of reported changes in the lives of Nijera Shikhi's neo-literates as a result of becoming literate

Change mentioned	Frequency mentioned by women	Frequency mentioned by men
Not cheated or "flattered" by people any more	1	4
Improved awareness and practice in health and nutrition	8	7
Able to read instructions on medicine bottle	3	2
Better poultry keeping awareness and practice	12	-
Able to take more responsibility for the family	4	2
Able to sign rather than use thumb print	4	3
Saving money	2	5
Know how to make oral saline and awareness of causes of diarrhoea	4	3
Now plant trees	7	2
Read and write letters	9	-
Awareness of marriage and divorce rights, dowry, women's and human rights	9	
Read books for pleasure and knowledge	10	8
Teaching others literacy and numeracy	12	10
Making lists and keeping records	10	
Able to read sign boards at road side, outside offices, and on the front of buses		5
Able to use fertiliser better and harvest better	6	3
Now keep accounts	5	3
Put pressure on children to attend school	1	2
Number interviewed who had completed the course	22	13

The list should be taken as indicative of the breadth of the beneficial changes that people can experience rather than as an accurate account of the frequency with which they are felt.

However in terms of the impression gained as to the frequency with which items occurred most, any list must include:

- improved agricultural techniques - especially improved poultry keeping
- the ability to read books - with novels and books on development topics such as health and agriculture being mentioned equally frequently
- teaching others to read and write - especially younger children
- reading signs was mentioned much more by the men
- greater awareness of health issues resulting in better health practice

In addition to this it should also be recorded that differences existed between different groups. For instance, most of the women interviewed at Parikhupsee mentioned that they now keep lists. At Lalamagira most of the women said that they had learnt a lot about diarrhoea - how to prevent it

though cleanliness, drinking clean water and using proper latrines and how to treat it using oral saline. One of the women said that they had previously had a lot of problems with diarrhoea in the village and they had decided to get rid of it adding "we don't use open latrines any more in this village" while another said before they had no idea what caused it, but now they are succeeding in getting rid of it (personal communication, 29/7/97, Juleka Khatun and Sajeda Begum, Nijera Shikhi learners, Lalamagira village).

Furthermore several people mentioned that previously they felt a sense of shame at not being able to read and write whereas now they felt proud. One older man said, "before my heart was in darkness, now it is in light" (personal communication, 27/7/97, Kahem Ali, Farmer & Nijera Shikhi student, Binshara village). While another described how being able to "sign" rather than use the thumb print was a turning point in his life (personal communication, 28/7/97, Gonzer Ali, Nijera Shikhi learner, Moheshrohali village).

It is also significant the way in which some people are able to make changes in their lives with greater confidence and ease. One learner told of how he sold his poultry birds to give him the capital to start a shop. This increased his income from Tk. 5/600 per month to Tk. 10/1200 per month. As a result he had now bought corrugated iron for his house rather than bamboo (personal communication, 27/7/97, Md. Abdus Salam, Nijera Shikhi learner, Binshara village).

People's self-confidence and self-esteem obviously increased as they became literate. People "feeling good" about themselves and no longer feeling ashamed means that they are more likely to be able to bring about change in their lives. Certainly the lives of all of the Nijera Shikhi learners interviewed had changed in different ways as they became literate and numerate. It is also interesting to see how learners in two of the groups described their occupation as "student" rather than a "worker in the household." This probably gives slightly greater self-esteem. One of the learners also used several English words to me - she had learnt them from a neighbour who went to high school. When asked why she hadn't gone to school she replied "Because I learn with Nijera Shikhi" (personal communication, 29/7/97, Juleka Khatun, Nijera Shikhi learner, Lalamagira village).

The difference in self-confidence was dramatically illustrated when the female group at Kundaeel was visited. The original group had finished the course eighteen months previously and was now reduced to seven in number, due mainly to women getting married and moving to their husband's village. At the same time a new group of learners had started the course, meeting at the same time. The women who had only been attending the class for a few months kept their heads lowered, covering their faces with their saris and avoiding all eye contact. When attempts were made to interview some of these women, one refused to be interviewed. With the two who agreed to be interviewed it was virtually

impossible to gain anything other than a yes/no answer. This was in marked contrast to the women who had completed the course who spoke with ease and confidence - as had all the other women interviewed.

Increased income and productivity of Nijera Shikhi learners

This information was gained from the interviews conducted with the learners

Table 4 Changes in income of male Nijera Shikhi learners

Name	Income in Tk. / month		Remarks
	Before	Now	
Abdul	700/800	1500/2000	established a carpentry business, keeps accounts
Afzal	400/500	700/800	established a fruit business, keeps accounts
Yar	500/700	1000	has a grocers shop
Mozammel	200/300	500/600	
Khalilur	400/500	700/800	income increased due to better poultry husbandry
Abdus	500/600	1000/1200	shop keeper, sold poultry to establish shop
Tofer	100/200	500/ 600	
Kasham	500/600	650/700	keeps better control of money
Abdul	500/550	800/900	
Elishipur farmer	300	600	
TOTAL MID FIGS	4575	8575	
AVERAGE	457	857	

It can be seen from this that the average monthly income increased by Tk. 400 = Tk. 4800 per year. This is from a course with a financial cost of just Tk. 85. The average percentage increase in annual income is 84%

Most village women in Bangladesh are only on the fringes of the cash economy. One of the indicators of the increases in productivity is the increased production of goods that can be traded in the village such as poultry. Some figures are given in the following table:

Table 5 Increases in the poultry output of female Nijera Shikhi learners

Name	Ducks		Chickens		Remarks
	Before	Now	Before	Now	
Masrufu	5	10	1	5	
Shakida	2	20 big 10 sml	0	0	1 goat before; 3 now
Mahfuja	4	9	1	2	
Khadizatal	5	19	3	12	
Tahura	4	8	5	15	& 2 lambs, also sold goat & cow
Sajida	2	12	2	12	
Juleka	3	6	2	7	
Fahima	0	15	0	30	3/4 eggs per day in winter
Hafeeza	0	0	0	15	had 0 geese then, 30 now has 12. Had 1 goat then 11 now 0. Made Tk 3000 to invest in trees
Mushida	5	10	5	25	before 1 goat, now 2; before cows 2, now 3
Laily	2	8	3	11	before 1 goat, now 3, same with cow
Ashia	0	4	0	24	
Mohmera	0	0	25	15	has killed and sold some chickens
Sakina	2	9	15	30	
Mazeda	10	20	5	20	
Shakhina	5	15	10	20	
Rahela	5	15	10	20	
TOTAL	54	190	87	263	
AVERAGE	3	11	5.5	15	

The village price of ducks is Tk. 40, chickens Tk. 50 (geese Tk. 100)

If we assume 2 cycles a year with the average extra ducks being 16 and chickens being 19, this gives a monetary equivalent of Tk. 1590 extra income per year from increased poultry production. This could give an increase in income from poultry of around 200%

(Estimates of village prices provided in personal communication by Mr. Mirza Abdur Rob, Executive Director of Kishan Jagorani Model Sangha, a local NGO based in Tarash, 31/7/97)

Table 6 Examples of increased tree planting by Nijera Shikhi female learners

Name	Fruit trees	Wood trees - sishu
Taheera	8	18
Khadizatu	13	
Juleka		4
Hafeeza	(50 guava, 50 local fruit, 10 coconut)	
Mazedu	30/40	
Shaklina	30/40	
Rahela	10 (betelnut)	

The data gathered is not extensive enough to calculate approximate average increases in income. However estimates given in Tarash indicate that:

1. A mango tree will start bearing fruit after about 5 years when it yields approx. 300 mangoes. At 10 years 600, 15 years 700, 20 years 500, 25 years 100. Total yield approx. 9500 mangoes. At 4 mangoes per Kg. there would be 2,375 kg. produced. At Tk. 20 per kg. this means the undiscounted value of the total yield would be Tk. 47,500 per mango tree. (These yield figures are within the limits of those given by Purselove (1974: 31) who gives yields as declining after the 40th year.
2. Each sishu tree will be cut down after 5 years with timber of Tk 700/800 in value. Branches will be cut off for a couple of years before for firewood.

(Estimates of village prices and yields provided in personal communication by Mr. Mirza Abdur Rob, Executive Director of Kishan Jagorani Model Sangha, a local NGO based in Tarash, 31/7/97)

Significant externalities or spillover effects

Externalities are effects, which accrue to people other than those directly participating in an action or project. They can be positive or negative.

With Nijera Shikhi the most obvious externalities are positive and include: increased family health, teaching of others and increased school attendance, increased tree planting and greater ease of communication in society.

Increased family health. Knowledge of increased family health was frequently mentioned as being something that people had learnt with Nijera Shikhi. As previously stated, in one village it was decided to make a concerted effort to reduce diarrhoea as a result of the new knowledge gained. In addition to this better nutrition is likely to result from the increased fruit and vegetable production in which many Nijera Shikhi learners engage as they become aware of the nutritional benefits of these.

Teaching of others and increased school attendance. Several of the helpers said that the children of participants and their siblings had started attending school now their parents and elder siblings were attending the literacy classes. Also significant is the number of additional people who are being taught in a non-formal way by the Nijera Shikhi participants.

Many of the Nijera Shikhi students who were interviewed mentioned that they taught other people reading, writing and numeracy. Most people taught younger brothers and sisters, nieces and nephews,

their own and neighbours' children. One person was teaching his wife who then taught their child. The level of attainment of these children was not formally assessed. In some cases it was teaching some letters so that they could write their names and the names of a few other people. In other cases the entire alphabet had been taught and simple words and sentences could be written and read. For some of these children this would be useful pre-school work, for others it would be additional support and encouragement to their formal schooling.

The number of people being taught in this way by each learner questioned about this, is as follows:

Table 7 Number of additional people being taught by Nijera Shikhi neo-literates

Number being taught by each individual	Total being taught	Number of individuals	Average
2,3,1,4,8,3,4,2,4,2,3,5,7,4,3,9,2	66	17	3.9

An average of 3.9 additional people are being taught for each neo-literate.

Increased tree planting Some indications of this have been mentioned in the previous section. The men were additionally planting trees but no attempt was made to quantify this. Obviously additional tree planting has many positive environmental effects including the reduction of soil erosion.

Illustrative stories from four people

Of equal importance to these indicators of change is the way in which they have combined in individual's lives. Four examples will illustrate this:

HAFEEZA is fourteen years old and has eight brothers and sisters. She says that before she joined the Nijera Shikhi class, two and a half years ago and became literate and numerate, she didn't know about savings or poultry husbandry but now she knows it all. Eighteen months ago she purchased a goat for Tk. 200 and from this she bred 10 goats, which she sold for Tk. 3,000. Now she has just one goat and has invested the money in tree planting. To date she has planted 50 guava trees, 50 trees of other local fruits and 10 coconut trees. In addition she now has 15 chickens, whereas previously she didn't have any. She started breeding geese until she had 30. Now she has just 12. Hafeeza teaches seven other children in the village who are about seven and eight years old. At first they were not interested in learning so she had to motivate them but now they often ask her to teach them. They meet in the yard. She enjoys doing this and sometimes calls them together to give a lesson. They now know the alphabet, can read words and short sentences but can't go through books. She thinks they will go to school. Hafeeza has read several books from the mini-library including ones on women's rights, education for all, divorce, and "where there is no doctor". When asked what she had learnt about

divorce she related a long and detailed story of a woman who had been given a verbal divorce by her husband but when the family went to the local chiefs it was ruled that this was not valid and so the husband had to take her back and support her.

TAHERA BEGUM is twenty five and has two children. Now that she is literate and numerate she finds it easier to maintain the family in a better way and "to plan to keep it small". She has lambs, goats, ducks and chickens. She sold her cow to buy corrugated iron for her house. She teaches her son who is 10 years old and her daughter who is 7 years old. They have both recently started school and can sign their names and read simple books. Before the course started she had four hens and now has eight. She used to have five ducks and now has fifteen. The increase is because she has learnt how to improve keeping poultry due to her reading in the course. She now knows that she can get the birds vaccinated by the livestock officer and that she has to give them tablets. Tahera has planted two mango, two jackfruit, four coconut and eighteen sishu trees for firewood. Furthermore she has started a vegetable garden where she grows pumpkin and greens. She and her family intend to eat some of the extra fruit and vegetables and to sell the rest.

MD. KHALILUR RAHAMAN is thirty five and has six children. Before he became literate he couldn't read the sign boards outside offices and so had to ask which office to enter which made him feel ashamed. Now he says he can read and write everything and he feels very good about it. He can now harvest better and can calculate the correct amount of fertiliser to use. When he travels on a bus he can now identify the correct seat to sit in. He has read four or five books from the mini library on topics such as the environment and physical health. Before he did the course his income was Tk. 400/500 now it is Tk. 600/700. He thinks that the increase is due to greater knowledge gained from the course. Most of the extra income comes from keeping his poultry better. Like all the other members of the group he is saving Tk. 5 per week. He hopes that one day he will be able to buy some land, start a business or buy some cattle with the money saved.

ABDUL AWALL is eighteen and has five brothers and sisters and is a farmer. Now that he knows more, he is trying to improve the life of his family. He has started a business collecting timber and making chairs and boats as a carpenter. He keeps accounts for the business and says that he used to earn Tk. 700-800 per month whereas now it is Tk. 1500-2000. He teaches his four or five nieces and nephews some simple literacy and numeracy. He has read three to four books from the mini-library.

Helpers and organisers

In addition to the learners, nine helpers (sebis) and three organisers were interviewed. These people do this work on a voluntary basis without any pay or honorarium. For the helper this usually involves

two hours a day for six days a week for a year. Some of the groups only meet for one hour a day. All five of the groups that I visited in the Tarash area had continued to meet with the helper for twelve to eighteen months after the end of the course, for the purpose of self-education and self-development. Nijera Shikhi recommends that each group should have two helpers. From the groups visited and the helpers interviewed it would appear that only a quarter to a third of the groups have two helpers. However this does not seem to inhibit their effective functioning.

The helpers seemed to do this work out of a sense of responsibility for their neighbours and because they enjoyed it. As one of them said, "I do it because from the bottom of my heart I want the village to become literate" (personal communication, 8/7/97, Mamena Begum, Nijera Shikhi helper, Parikhupee village). All of the helpers interviewed said that they would help another class when the current one finished. Their enjoyment, of and enthusiasm, for their work was always very apparent and one would guess that it enhanced their status in the village - possibly more so because it was voluntary.

Three of the helpers interviewed were high school students, two studying for their HSC and one for her SSC. Of the helpers interviewed most had attained SSC (grade 10) while two had just grade 8 certificates. In two of the villages the helpers said that previously they had been the only literate women there. In one of these there were now 30 - 40 women who could read and write. Furthermore, once one class had begun and its effectiveness had been seen, four other classes were started. In another village the helper said that previously there had only been four literate people in the village before he started the class. This man was an organiser and helper who also hoped that literacy and numeracy and the education that came with Nijera Shikhi would help to raise the consciousness of people in the village and so stop the spread of an unruly and disruptive element among some of the youths. This element had at one stage interrupted the group and tore up their books, yet still they were determined to continue, saying that nothing would stop their self-education.

Often the helpers had been approached by the learners to be their helper. In some cases husbands had persuaded their wives to do the work. The helpers spoken to had all done a three day course on how to be a Nijera Shikhi helper.

All the helpers said that they had also learnt a lot by doing the work. One commented that it had helped to improve her reading and writing while all of the others reported that they had learnt about the same sort of things as the learners:- better poultry husbandry, better health care and prevention especially with regards to diarrhoea, making oral saline, the need for cleanliness and cancer prevention. Co-operatives, women's rights, tree planting and use of fertiliser were among the other things mentioned they had learned.

With regard to the changes seen in the students during the course the helper's opinions generally confirmed the information given by the students. They had greater self-confidence. They can sign their names. They teach younger children and brothers and sisters. The children's school attendance increases. People couldn't "flatter" or cheat them any more - especially the business people who they trade with. They can look after their poultry better; have better health practices and are more aware of the environment and family responsibilities.

The three organisers interviewed were all in the Kaloroa area. They had all attained HSC and commented that doing the work helped to keep their minds active whilst they were unemployed. They also said that the villages were so poor they hoped the work would raise the standard of living for the people. Again the organisers commented on similar changes in the students. Several of them had started businesses since starting the courses and were able to keep the accounts properly.

9. The effectiveness of Nijera Shikhi

This Chapter will first of all consider how effective Nijera Shikhi is. It will then examine why it is effective.

HOW EFFECTIVE IS NIJERA SHIKHI?

To consider how effective Nijera Shikhi it is necessary to have criteria against which to judge it together with benchmarks from other organisations doing similar work with which to compare it. It has previously being stated in chapter 2 that the criteria to be used are:

- *Effectiveness* - in terms of imparting retained literacy skills
- *Cost effectiveness* - in terms of the unit cost per learner divided by the effectiveness to give the cost per retained literate person
- The *changes in people's lives* occurring as a result of attending a particular literacy course

Subsequently the attributes of sustainability and replicability are also considered.

It was intended that this data would be gathered for the three types of organisation previously described, so that a comparison of these could be made using the same standards. However, as mentioned in chapter 4, this was not possible due to floods and a strike. Therefore for the purpose of assessing Nijera Shikhi's effectiveness it necessary to use secondary sources in order to make a comparison.

Effectiveness of acquisition of literacy and numeracy skills

As previously mentioned Helen Abadzi estimates that literacy programmes generally have a 12.5% success rate.

ActionAid commissioned its own evaluation of REFLECT work done at Bhola Island in Bangladesh. Unfortunately this evaluation was done towards the end of the completion of the course and so does not provide a comparison which takes account of relapse.

This evaluation gives a figure of 60%, of those who initially enrolled, achieving literacy (Archer and Cottingham 1996b: 44). The evaluators also suggested that there would be a high likelihood of retention (ibid.: 81). However with an average attendance of 74% of those who are regarded as

literate and just 56% of the initial enrolment and, more importantly, with no systematic post-literacy work this suggestion still needs verification.

Results from the Government schemes are mixed. The ActionAid evaluation used control groups employing government primer based methods and found only 26% effectiveness. However, alongside this, should be placed a large scale evaluation of the Lalmonirhat TLM carried out by Prof. Ahmed which purports to test a very large sample of 4, 800 neo-literates.

This evaluation included tests in writing, reading and numeracy with 60% being regarded as a pass mark. The results were as follows:

- writing 86%
- reading 88%
- numeracy 96% (Ahmed 1996: 61)

As functional literacy is conditional on attainment in all three areas, it is reasonable to take 86% as the appropriate figure. However the figure of 86% is of those tested rather than of the initial number of learners. The coverage rate was 79.4% (Ahmed 1996: 33).

This test was again conducted at the end of the course so no account of relapse has been taken. Again without effective post-literacy work this could be high. The Total Literacy Movement Campaign aimed to eradicate illiteracy from the District. The evaluation of this campaign records a 94.2% coverage (Ahmed 1996: xvi) with an 86% success rate. In spite of this two of the Union chairmen in Lalmonirhat have already approached Nijera Shikhi to make their Unions literate. Therefore in taking a figure of 86% it should be recognised that this may well be on the high side.

For Nijera Shikhi a figure of 73% seems a reasonable estimate for literacy retention eighteen months after the completion of the course (see chapter 8 and annex 5). However this figure is not directly comparable as the measurement takes place at a much later date by which time relapse is more likely to have occurred. From the data of the test trials on neo-literates who had just finished their course, it was estimated that a figure of between 75% and 85% was appropriate for Nijera Shikhi at that stage. Certainly 85% seemed perfectly attainable and likely. However this was an estimate based on a test that was being modified and so should be treated with caution.

In comparing effectiveness rates for twelve months after the completion of the course some adjustment must be made for relapse. In the absence of any data it seems reasonable to take the estimate of retention for Nijera Shikhi and apply this to the other data. For Nijera Shikhi this is $73/85 \times 100 =$

86%. However with none of the other programmes having a coherent and well structured post-literacy scheme this is probably a generous estimate especially when compared to other researchers' estimate of 50% relapse (see Abadzi 1994 & Commings 1995: 44).

This would then give the following estimates for effectiveness at least one year following the completion of the course.

Table 8 Estimates of the effectiveness of the three programmes one year after completion

REFLECT	52%
Govt. AA control groups	22%
Govt. TLM	74%
Govt project No: 1	Not known as new project
Nijera Shikhi	73%

Cost effectiveness

To calculate the cost effectiveness of the different schemes it is necessary to know the unit cost per learner and to divide this by the effectiveness to give the unit cost per retained literate.

The difficulty with this is that not all organisations include the same figures in their calculation of unit cost. Both REFLECT figures and Government figures do not include the cost of central management overheads and infrastructure. It has previously been estimated in Chapter 6 that for REFLECT this may increase the unit cost from Tk. 700 per learner to Tk 1200 per learner. Alongside this unit cost figures taken from five centres in Tikkapara (see annex 4) indicate that unit costs are TK 844 before drop out and TK. 1189 after drop out. These later two figures still do not take account of central management overheads, which may be around Tk. 500 per learner. Therefore it seems reasonable to take an estimate of Tk. 1200 per learner as the basic unit cost for REFLECT as run by ActionAid in Bangladesh.

The unit cost for the government scheme is given at Tk. 495 for the DNFE project No: 1 and Tk. 202 for the TLC programme (see chapter 7). The calculation of overheads is difficult to make with DNFE as the budgets have apparently been drawn up specifically to make it impossible to make such a calculation. After several hours studying the budget figures in the draft final report of the technical assistance mission (ADB 1994) and the Aide Memoire of the ADB (ADB and IDA 1995) it was concluded that a total unit cost figure of Tk 1200 was appropriate for the project No: 1. This figure

was confirmed by the author and team leader of the draft final report who, estimated it at between Tk 1100 and Tk 1300. Therefore if similar overheads are added to the TLC figure of Tk. 202 this would give a total unit cost of around Tk. 900.

With Nijera Shikhi unit costs are calculated at Tk. 85 per learner (see annex 3). This figure does include all overheads but does not include development costs. This is because there were no financial costs attached to these as they were done by voluntary labour. It is not possible to check these by dividing an annual budget by an annual number of learners as has been done for REFLECT, as Nijera Shikhi does no work on fixed cycles. However the figure of Tk. 85 does include Tk. 35 for the cost of materials which should be met by local groups. Observation indicates that not all of these materials are being provided and many groups in fact get by on the minimum possible. This would produce a lower unit cost figure for the actual effectiveness measured.

This analysis gives the following figures for cost effectiveness.

Table 9 The most likely cost effectiveness figures for the three programmes

	REFLECT	Government		Nijera Shikhi
		Project No 1	TLM	
Likely estimate of unit costs per learner	Tk. 1200	Tk. 1200	Tk. 900	Tk. 85
Estimated effectiveness after one year	calculate at 52%	not known (take 80% as a guess)*	calculate at 74%	73% from survey
Likely cost per neo literate one year after course	Tk. 2300 = £32.39 = \$52.27	Tk. 1500 = £21.12 =\$34.09	Tk. 1216 = £ 17.12 = \$27.64	Tk. 116 = £1.63 =\$2.64

Exchange rate of £1 = Tk. 71 and \$1 = Tk. 44 effective on 6 Aug. 1997

* The guess of 80% effectiveness for the Government's project No: 1 is probably too high but is included for illustrative purposes to show its cost effectiveness if it achieves such a good result.

These figures are based on estimates of costs that could be disputed. Therefore it is reasonable to calculate costs on the figures for minimum possible costs. As previously stated for REFLECT and the Government programme these do not include central management overheads which are included for Nijera Shikhi.

Table 10 Lowest possible cost effectiveness figures for the three programmes

	REFLECT	Government		Nijera Shikhi
		Project No 1	TLM	
Lowest estimate of unit costs per learner	700	495	202	85
Estimated effectiveness after one year	calculate at 52%	not known take 80% as a guess	calculate at 74%	73% from survey
Lowest cost estimate per neo literate one year after course	Tk. 1346 = £18.95 = \$30.59	Tk. 618 = £8.70 =\$14.06	Tk. 272 = £ 3.83 = \$6.18	Tk. 116 = £1.63 =\$2.64

Exchange rate of £1 = Tk. 71 and \$1 = Tk. 44 effective on Aug. 6 1997

Changes in people's lives

Any estimate of the ability of a course to enable people to bring about changes in their lives is bound to be subjective and difficult to quantify. Any comparison of this between courses will be more so. However some comment on this important aspect must be made.

The ability of REFLECT to enable people to bring about changes in their lives has been recorded in their evaluations (Archer and Cottingham 1996b). It is not the case that REFLECT is the only, or even, the most effective way of doing this. The interviews carried out amongst neo-literates who had learnt via Nijera Shikhi shows quite clearly that this method also enables people to bring about changes in their own lives. Reading Archer and Cottingham and talking to different ActionAid staff it would be easy to conclude that primer-based literacy cannot bring about empowerment. The evidence presented in chapter 8 demonstrated that this is not the case.

Without further research it is impossible to say which type of scheme enables people to bring about changes in their lives more easily and to the greatest extent. Even with such research a judgement of this kind would be of dubious value. Certainly the type of changes described by Archer and Cottingham and listed by ActionAid staff at Dewangonj (see page **Error! Bookmark not defined.**) are very similar to those recorded by neo-literates who have learnt via Nijera Shikhi and which have been described in chapter 8 and listed on page **Error! Bookmark not defined.**

With regards to the effectiveness of government schemes in this aspect the only published research is that recorded by Archer and Cottingham and is sceptical about the empowerment taking place in the control groups. However it may be that these observations took place too early in the course. At present it seems best to conclude that there is no reliable evidence either way on this aspect.

A summary of this section is as follows:

Table 11 Summary of the impact of the three programmes

	REFLECT	Government		Nijera Shikhi
		Project No 1	TLM	
Estimated effectiveness after one year	calculate at 52%	not known (take 80% as a guess)	calculate at 74%	73% from survey
Likely cost estimate per neo literate one year after course	Tk. 2300 = £32.39 = \$52.27	Tk. 1500 = £21.12 =\$34.09	Tk. 1216 = £ 17.12 = \$27.64	Tk. 116 = £1.63 =\$2.64
Lowest cost estimate per neo literate one year after course	Tk. 1346 = £18.95 = \$30.59	Tk. 618 = £8.70 =\$14.05	Tk. 272 = £ 3.83 = \$6.18	Tk. 116 = £1.63 =\$2.64
Ability to enable people to change their lives	Yes	Not known	Not known	Yes

Exchange rate of £1 = Tk. 71 and \$1 = Tk. 44 effective on Aug. 6 1997

SUSTAINABILITY

It has been mentioned previously in chapter 2 that sustainability should be looked at on the different levels of the learner, the programme and the organisation.

Learner sustainability

With regards to the learner the literature relating to sustaining literacy and preventing relapse appears under the heading of "post-literacy" (see Comings 1995 and Rogers 1994). The main thrust of the discourse in this area is that without some sort of post-literacy activity there is a strong likelihood of relapse. Post-literacy courses make little difference to this - though they may help to improve the literacy skills of those who retain them. Best practice seeks to integrate into courses everyday activities which need literacy and to use real materials related to everyday life in the course (see Rogers 1994: 55). People will then continue with these activities and so sustain their literacy. There is also some evidence to indicate that retention is correlated to hours of instruction and that listening to the radio may also help retention and comprehension (see Comings 1995).

From a superficial look at village life in Bangladesh during the course of this research it would seem that there are few if any activities in villages which need literacy - this is not surprising in a county that has such low literacy rates and where the number of literate people in a village can often be

counted on one hand. This point is echoed in the ADB draft final report "... where virtually no opportunities exist to practise and develop newly acquired literacy skills - a situation typical of many of the rural poor in Bangladesh - literacy appears likely to be lost" (ADB 1994: 97).

In this situation activities are needed as a part of the course which people will continue after its completion. These should use and extend their literacy skills.

Previous government schemes appear to have had little success in this area. A point made indirectly by the ADB which in its draft final report includes provision of funding for research into adult learner needs in this area. (ADB 1994: 97). The present format in project No 1 of a nine month literacy course followed by a three month post-literacy-course may be too much like the type of "bolt-on", post-literacy activity, based on assumptions which Rogers finds questionable (Rogers 1994: 46).

ActionAid and REFLECT are obviously also aware of this problem and hope that by integrating the literacy work with other developmental activities which need literacy, such as savings and credit work and income generating activities, literacy retention will be high. It should be remembered that ActionAid REFLECT learners are also shomti members who engage in such a wide range of activities. However the level and breadth of numeracy, and more particularly literacy, that these activities require may not be high. The visit to Dewangonj indicates that in reality there may be no systematic and coherent post-literacy activities. In the absence of research involving post course testing on REFLECT this has to be a large unknown as to the usefulness of this approach. It should also be noted that if REFLECT is used by other agencies where members are not a part of a shomti or similar group, relapse is likely to be considerably higher.

With Nijera Shikhi, testing was generally carried out eighteen months after the completion of the course and so took account of any likely relapse. In order to sustain literacy Nijera Shikhi has established a simple yet highly effective system of mini-libraries. After six months of the course the groups begin to use the mini-libraries on an everyday basis. One of the impressive aspects of Nijera Shikhi was that still, some two years later, these groups are meeting to read and discuss books from the mini-library, to continue their savings schemes and to talk about and plan different development activities. This is done for one or two hours, six days a week. At least three of the five groups visited had no idea that a visit was to be made, yet in these groups there was still an attendance of between 70 and 100% of the remaining members. Besides having material that attracts people's attention and holds their interest, another ingredient in this success could be the voluntary nature of the work and the fact that the learners are as much responsible for the groups as the helper. This means that Nijera Shikhi learners do not find that when the teacher's "honorarium" stops so does the group. Their helper has as much interest in maintaining their literacy as they have - that is why they have helped in a

voluntary capacity in the first place and then continue to do so. In addition to this, all of the helpers interviewed said they had learnt a lot and were continuing to learn from the activities. This is more a situation where continuing the activity is of benefit to both learners and helpers and the distinction between the two becomes increasingly blurred.

Furthermore Nijera Shikhi's integration into its learner's programme of training by local government officers on different development activities also follows good post-literacy practice.

Organisational sustainability

Virtually all countries have governments which sustain themselves as institutions in one form or another. Generally they will raise revenue through taxation, aid and borrowing and then engage in different activities. Literacy can be one of these activities and the sustainability of literacy work, as with any other activity, rests on political decisions.

Large international NGOs such as ActionAid sustain themselves as organisations through their fund raising activities. Often they will have large departments devoted to raising funds which come from two sources. Firstly the general public and private sector and secondly from government departments. Raising funds from the latter source depends on the ability of the NGO to formulate, present and execute projects of interest to these donors. Large NGOs have developed the necessary skills to raise funds from both of these sources and so ensure organisational sustainability in this way. If they hadn't done this they wouldn't survive.

Nijera Shikhi as a people's movement is in a different position. It has the same fund raising options as an NGO but not the same expertise. This is both its strength and its weakness. One of the reasons Nijera Shikhi is so cost effective is because it is low cost. It doesn't pay for large fund raising departments and glossy publicity material. Unfortunately this also makes it extremely vulnerable as an organisation. It lurches from one month to the next without any clear idea as to how it will meet the next month's bills. This situation is a challenge both for Nijera Shikhi and for large donors. Nijera Shikhi needs to develop a low cost and effective way of raising the large amount of money that it needs to fulfil its aim of "literating" Bangladesh in ten years. At the same time large donors need to develop the flexibility needed for working in partnership with a people's movement with its different characteristics, strengths and needs to that of an NGO.

Uphoff makes an important point in this regard arguing that formal evaluation can work to the detriment of sustainability in that it tends to ignore or undervalue those externalities which ensure the sustainability of a programme (see Uphoff 1996: 24). He argues that positive sum dynamics and

relationships are the essence of sustainability. The totally voluntary nature of Nijera Shikhi work, combined with the continuation of Nijera Shikhi groups more than a year after their formal completion, indicates that Nijera Shikhi is able to create such positive sum (or win-win) situations for both learners and helpers. Yet placing a value on this raises difficult questions, which many evaluators would avoid.

This also presents a challenge for the Bretton Woods institutions. As briefly outlined in Chapter 3, they have already played a large part in pushing back the frontiers of the state to facilitate the release of entrepreneurial energy in the commercial sector. However, they may have yet to develop the same degree of enthusiasm for encouraging governments to pull back the frontiers of the state to facilitate the release of innovation and "social energy" from which activities such as literacy could benefit.

This point is made in the draft final report of the ADB mission when it mentions the desirability of contracting NGOs to use their own programmes and methods to do literacy work (ADB 1994: 58) and of the risk of not working in genuine partnership in areas such as policy formulation (ibid.: 97). However the reality is that none of this is actually happening and, as is mentioned in chapter 7, the government is currently insisting on the use of its own methods and material.

However Nijera Shikhi as a self-proclaimed people's movement should have another avenue of ensuring financial sustainability not open to other types of organisation:- its members. As outlined in chapter 3 a people's organisation is unique in its ability to make use of 'threat', 'economic' and 'integrative' power. Many of its members may be poor when they start the course but evidence presented in chapter 8 indicates that their incomes can soon rise by substantial amounts. If Nijera Shikhi was to find an effective way of encouraging each member to make a voluntary contribution of Tk. 100 after the completion of the course to enable other Bangladeshis to become literate in the way they themselves have, then it would sustain itself for as long as it remains effective and until it fulfils its aim. In addition to this the lobbying potential a people's movement could generate is considerable, The influence of hundreds of thousands of neo-literates writing to appropriate power brokers should not be underestimated.

Without developing an effective fund raising capacity Nijera Shikhi will have difficulty in sustaining itself. It has already signed a contract with the government to implement some of its literacy work. In doing this it is having to use methods which it believes to be inferior to its own and staff will have to be trained in these methods as well. There is a danger of this diverting too many of Nijera Shikhi's resources away from doing what it is good at, and becoming more like a public service contractor. The temptations of this are understandable and the dangers are real, both were looked at in chapter 3.

There could be another danger to Nijera Shikhi's sustainability. While it needs large amounts of money to enable Bangladesh to become literate there are also large dangers in this. Korten writes "True movements are the purest of voluntary phenomena. Perhaps the surest way to kill them is push them toward bureaucratisation by drowning them in money" (Korten 1990: 126). He continues with examples of when this has happened, one of which was Dr. Yen's literacy movement in China in the 1920s and 1930s. Furthermore it has previously been noted in chapter 3 (page **Error! Bookmark not defined.**) that without a reason for refuting Michels' 'iron law of oligarchy' GROs are more vulnerable to their leaders skimming off benefits. However, in the case of Nijera Shikhi the ideal of "literating Bangladesh" may serve to refute his law.

Sustainability of method

In theory the method should be used as long as people find it suits their needs. In this the need of the learners for an effective method combined with the needs of donors for a cost effective method should be paramount. In the absence of reliable comparative information in both of these areas, other criteria are likely to prevail in ensuring the sustainability of particular methods and programmes. These criteria are more random and relate more closely to institutional factors and organisational sustainability previously examined.

All of the organisations visited were convinced that their method was the best - usually saying that it had been developed "scientifically", although not explaining what this might mean, and that local and international consultants had been used to develop it. It almost seems as if being convinced of the unquestioned and universal applicability of a particular method is a matter of faith for administrators of literacy programmes. While commitment is admirable, blind faith can lead to an unnecessary waste of resources. It would be better if different methods were viewed more as a 'gene pool' where variety and diversity are important, enabling different applications in different situations.

REPLICABILITY

There are two levels at which replicability is relevant: national and international.

National replicability

National replicability is the ability of the programme to be replicated and adapted to different areas and target groups within a country.

For a government programme this is largely a case of making a bureaucratic decision as to where to execute a programme and subsequently implementing it. The main constraint is likely to be finance and local political commitment amongst other competing priorities.

For an NGO the process is essentially the same with the same constraints of finance and local interest.

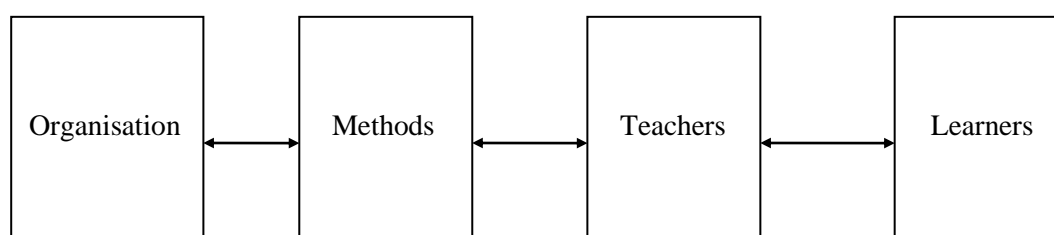
For a people's movement it is a case of how it spreads rather than if it is replicated. Many of the groups visited and helpers and organisers who were interviewed mentioned how once one group had started in an area and was seen to be effective, others were often started as well. The main constraint again appears to be finance. The other constraint could be a shortage of willing helpers. One of the strengths of Nijera Shikhi already noted is the way helpers continue to work with the groups long after the initial year. Unfortunately this could also mean that such helpers are not available to work with new groups. However the organisers who were asked said that, to date, there had been no difficulty in finding suitable helpers.

As regards international replicability the issues are similar for governments and NGOs, to those related to national replicability. For a people's movement it is a case of a voluntary literacy movement spreading to other countries. Ways of working and stimulating interest among potential learners are easily replicated. The production of appropriate materials, using Nijera Shikhi self-education methods in another language, is more difficult. In essence it revolves around having one or two individuals who have the commitment, experience and vision to do this. International replicability for a people's movement rest mainly on there being such people who can give this time to enable development in new countries.

WHY IS NIJERA SHIKHI EFFECTIVE?

From the perspective of effectiveness, cost-effectiveness and the ability to enable people to bring about change in their lives Nijera Shikhi is highly effective. This section examines why this is the case.

In any educational work there are four important variables:



The learners and teachers are likely to be very similar which ever organisation or method is used. What will alter is their reaction to an organisation and method. In pedagogic work this affects learner motivation. In andragogic work these factors can affect not only motivation but can also generate "social energy" a much neglected, but extremely powerful, resource in development work. The discourse on the various forms of participation shows how it can increase motivation and effectiveness. The concept of social energy goes beyond this and is explored further in chapter 10.

In terms of type of organisation, Nijera Shikhi as a people's movement relies on voluntary labour. This is one factor that aids its effectiveness. Volunteers are doing the work because they want to and because others want them to. Helpers and learners have the same goal - the learners should become literate. The helpers are not doing it for the money, which can never be enough for such work and can often introduce an element of discontentment, de-motivate helpers. ActionAid staff at Dewangonj said how facilitators frequently complained about how little their honorarium was. In addition to this it has already been noted how Nijera Shikhi classes turn into study groups for self-education when the formal course is finished. This is a powerful force for literacy retention and to enable people to continue the process of change that is occurring in their lives.

Its methods of operation as a people's movement are also extremely effective in enabling it to spread quickly and at low cost. Already Nijera Shikhi's 4,000 voluntary organisers and 6,000 voluntary helpers have enabled over 121,000 people to start to become literate with 24,000 of these already being in the post-literacy phase.

Nijera Shikhi uses local resources to which ordinary people have access, to do its work. All workers use local transport to travel around. Buses, rickshaws, ferries, boats and walking are all used. Nijera Shikhi has no vehicles of its own. Which is something that can easily escalate costs as well as separating workers from the people they are working with. When travelling from the rail station to ActionAid office at Dewangonj we ploughed our way through rickshaws and people with a horn blaring as people jumped into the gutter to avoid us. With Nijera Shikhi we would travel on van rickshaw and arrive at villages in a way which seemed natural and in harmony with people's lives. Furthermore no special classrooms are built. Learning takes place in the open, on verandas and in village rooms. One class visited was in someone's bedroom! I suspect that this helps village people to start to see Nijera Shikhi more as a movement they can join than as an outside body which is there to be pressurised for what can be got out of it. Working in partnership with local NGOs re-inforces this.

Another factor contributing to the effectiveness of Nijera Shikhi is its andragogic techniques. Too many literacy schemes treat adult learners as if they are children and fail to start from where the learner is and build on that knowledge. The learner is regarded as an empty vessel to be filled up with reading and writing skills. This can further undermine self-confidence. In addition some schemes spend a lot of time learning the alphabet. This is a tiresome process making learners feel as if they are not making any progress. A high initial drop-out results: Abadzi estimates this to be at 50%. Furthermore many schemes develop reading skills before writing, which means that the learner is passive rather than active. The Nijera Shikhi method of self-education - helping people to recognise what many of them already know and then building on this; teaching writing before reading and so being active right from the start; enabling people to write a simple letter in their very first lesson, is very effective. It takes on board the new concepts of the "ideological approach to literacy" mentioned in chapter 6 in a simpler and more cost effective way than does REFLECT. This combined with the use of material which is relevant to participant's everyday lives and which maintains the interest of both learners and helpers means that Nijera Shikhi has developed a highly effective package. If this were not so both learners and helpers would stop using it as they have no reason to continue if they do not find the process and activity both useful and enjoyable.

Nijera Shikhi's method of encouraging the learners to select their helper is probably another characteristic that enhances its effectiveness. The learners in the village will know which of their literate neighbours are most likely to enjoy helping them, remain committed to doing so and have the type of personality they will respond to and enjoy working with. Furthermore the learners have a larger degree of ownership and control of the group from its inception. They are active in its formation rather being passive consumers of a service provided by a body in which they have no stake.

In addition to this, the effective use that Nijera Shikhi makes of its mini-libraries as outlined in the previous section on sustainability adds to its effectiveness. This is also important in helping people to bring about change in their lives. The power of the written word to neo-literates should not be underestimated. Rokeya Rahman Kabeer who founded Saptagram Nari Swanirvar Parishad, an organisation which engages in income generating activities and literacy work among destitute women, tells how she used to try to get women to use human excrement as fertiliser but with no success. Then one day she saw some women in her organisation doing this. She asked them why they had changed? It was because they had read in a story about someone who was using this form of fertiliser, so if it was acceptable for him it was all right for them. The story was one that Rokeya Rahman Kabeer has written as reading material for neo-literates! (Personal communication, Rokeya Rahman Kabeer, founder of SNWP, 3/8/97). Repeatedly in the course of interviews women told me how they had learnt that women should not get married until the age of eighteen and men should not be married until the age of twenty one and that dowry is bad. In a country where women can get married very young and where giving dowries can financially cripple families (see Kabeer 1996 and Gardener 1991) the ability of the written word to bring about more than just slight changes should not be dismissed.

The ADB mission indicated in its report that clustered provision tends to be more effective than single centres (ADB 1994: 69). Nijera Shikhi does this where ever possible with local organisers establishing a minimum of five groups in an area.

In addition to this it should be appreciated that Nijera Shikhi's system of self-education gives it added flexibility. This means the "drop-outs" can later become "slot-ins". Such a feature is especially important for poor people, such as day labourers, who can't afford to attend classes at certain times of the year. Nijera Shikhi offers them the possibility of stopping and subsequently re-starting their learning in a way which most schemes would find difficult to do. At Penguary eight of the students had dropped out but according to the helper intended to restart their education (personal communication, Hamida Begum, helper Penguary village, 28/7/97).

To summarise Nijera Shikhi's effectiveness stems from several factors. Its voluntary nature, generation of "social energy", innovative organisational and andragogic methods and good post-literacy practices all combine to make it a highly effective player in the field of literacy provision.

DOES THIS EFFECTIVENESS MAKE NIJERA SHIKHI DIFFERENT?

Nijera Shikhi's aim is to eradicate illiteracy in Bangladesh. It is not interested in merely reducing illiteracy. This makes Nijera Shikhi different from other organisation. It is interesting that of the three organisations visited, Nijera Shikhi was the only one to talk seriously of eradicating illiteracy from Bangladesh and the only one to present a coherent plan for achieving this (see annex 7). The founder of Nijera Shikhi, John Hastings, emphasises this by pointing out that other programmes, which work with only a few hundred thousand illiterates, can give the illusion of tackling illiteracy while all the time the problem is getting worse. He calculates that there are two million new illiterates each year in Bangladesh (personal communication, John Hastings, founder of Nijera Shikhi 13/9/97). It is Nijera Shikhi's extremely high cost-effectiveness which enables it to have such a radically different goal and in having such a goal it has to have cost-effective methods and operations.

A further difference in Nijera Shikhi is its flexibility derived from its methods of self-education. The goals of the learners will change as they start the process of self-education. Initially they may have had the goal of learning to read and write. After a few weeks they see there are possibilities beyond this and start the process of "unhooking" themselves from this single goal (personal communication, John Hastings, founder of Nijera Shikhi 13/9/97). Evidence from visits in the Tarash area indicates that for many of the Nijera Shikhi learners the goal becomes one of continuing self-education combined with self and family improvement.

10. Social Energy - The Development Resource of People's Movements

" - I am moved by your work. What inspires you?

- First my religion, which nourishes the soul.

Second is art, which nourishes the heart and the feelings.

Third is the interactions of the people of my village, which create social energy.

- Balinese painter"

(Soedjatmoko 1986: 19)

The concept of social energy has no place in mainstream development discourse, yet it is this concept, as expounded by Uphoff (1996), Soedjatmoko (1986) and Hirschman (1984), which seems to be at the heart of Nijera Shikhi's effectiveness. In a sense this is not surprising as development thinking is largely based around western social sciences in general and economics in particular. These disciplines are based, on what was originally a simplifying methodological assumption, that people are essentially selfish and individualistic. While many useful insights are to be gained from this assumption the problem is that, within western culture, it has become a prevailing belief around which policies and institutions are based. By its institutionalisation it is further re-inforced, its validity enhanced and people's behaviour altered, to become more self-centred and individualistic. The momentum gained by the counter-revolution in development economics during the last twenty years has ensured the adoption and institutionalisation of these values in much development thinking and practice.

Two types of goods

Economics is based around the idea of scarcity. Wants are infinite yet resources are finite leading to the problem of scarcity. The more you use scarce resources the less are available for you, or others, to use in future. For example, if I have a plate of rice and eat some there is less left to eat later. Economics is concerned with the efficient use of such scarce resources.

While the insights to be gained from economics into the efficient use of resources are of immense value, these insights should not hide the existence of other types of goods which are also important to us. Qualities such as friendship, trust, wisdom, ideas, ideals and love do not diminish the more they are used; in fact, the opposite happens. The more that we trust each other the deeper the trust becomes. Rather than having less trust we have more. It seems appropriate to refer to these as "generative goods" as it is by their use that more are generated.

The sources of social energy

Social energy is a generative good; as such it has been neglected by mainstream development practice, based on western social science assumptions. Most third world cultures are village centred. In the

village everyone knows everyone else and virtually everyone is interrelated in some way or other. In this context individualism and selfishness have to be placed alongside social responsibility, custom and tradition. Obligations to oneself and one's nuclear family must be placed alongside those to one's extended family and the village. Indeed, in many third world societies the concept of the nuclear family has little meaning besides that of the extended family. Children can be brought up almost as much by the village as by their parents. It is in this context that generative goods, such as social energy, which are derived from the interaction of people and are nurtured by their open sharing are more likely to flourish.

Uphoff (1996) asserts that the sources of social energy are ideas, ideals and friendship.

Ideas: in reviewing the remarkable involvement of people in an irrigation project in Gal Oya Uphoff writes: "Time and again we saw people respond positively to new ideas that were simply and clearly laid out, especially if they tapped on certain values people held.." (Uphoff 1996: 360). A similar thing could easily be said of Nijera Shikhi. In conversations learners, helpers and organisers repeatedly said what a "good method Ja Chai is", that "it works so well" and "self-education is such a good idea" (numerous personal communications, July 1997). Staff who had been employed for just a few months also said that Nijera Shikhi is a good idea simply because it works so well.

Nijera Shikhi additionally draws on the idea of voluntary service "that people are not paid is a strength of Nijera Shikhi - money can't buy success and sometimes it plays a negative role in this kind of work" (personal communication, Mrs Margina Begum, Programme Officer, Nijera Shikhi 24/7/97).

Ideas are generative goods. As Uphoff writes "Ideas are positive-sum because *they can be given to others without being lost*...ideas shared with others usually acquire more significance and power" (Uphoff 1996: 397). When ideas are exchanged they are added to from other people's insights and experiences, they can be enriched and enlarged and so can gain value. The more an idea is shared the more it can become a reality. The idea of voluntary service is fundamental to Nijera Shikhi. As it is shared the more it becomes a possibility and a reality.

Ideals: to Uphoff "By definition, ideals are positive-sum, being ideas that have as their object some collective interest or common good" (Uphoff 1996: 377) he continues "Most ideals relate in some way to the norms of generosity and co-operation (ibid.: 378). "*..they direct thinking towards common interest* and away from purely selfish notions. They justify actions that serve interests beyond one's own by identifying one's own interests with those of the community" (ibid.: 379) and in accounting for the Irrigation Organiser's (IOs) role at Gal Oya he writes that "They repeatedly worked well beyond

the requirements we had set, motivated by what can best be described as idealism" (ibid.: 364). Summarising this he further concludes:

"To try to understand all these energised efforts without some reference to ideals would be mistaken, since the most active IOs, farmers and officials were the most idealistic in each group. Expressions of idealism were infectious, changing the way others defined and carried out their tasks. We were all catalysts in our own ways. The desire to see long-standing disadvantages eliminated was a motive force not to be underestimated..." (Uphoff 1996: 364-5).

In Nijera Shikhi "freeing Bangladesh from the curse of illiteracy" is a powerful ideal which motivates people in their work. Several of the helpers said how they longed for the day when their village would be free from illiteracy. In order to achieve this voluntary helpers take on a large commitment, six days a week for a year, with many continuing for much longer. Organisers work long hours over several years. The paid workers in Nijera Shikhi's Dhaka office are similarly motivated by this ideal, often working hours considerably in excess of those required.

Nijera Shikhi additionally draws on the ideal of responsibility. Both helpers and workers said how they as literate people felt a responsibility to help those who are illiterate.

Friendship: Uphoff asserts "The programme in Gal Oya derived its greatest thrust from friendship.." (Uphoff 1996: 365). He traces the discourse on friendship back to Aristotle who saw friendship as combining self-love with love for others and the sharing of ideals and interests with the exchange of ideas. Friendship leads people mutually to value each other's welfare (Uphoff 1996: 380). It can be seen how friendship is needed to nurture social energy by looking at the welfare state in the UK where friendship is absent. While the welfare state is a good idea which is based on a worthy ideal of poverty eradication, the near absence of friendship has meant that it has evolved as a system from which people feel alienated. This is in contrast to the blood donor system in the UK which by its voluntary nature relies on friendship and people valuing other's welfare.

It is hard to say why, but one of the differences felt between Nijera Shikhi and the other organisations visited, was that at Nijera Shikhi there were ways in which you felt you were with a group a friends who were interested in your research, wanted it to succeed and would help to make it succeed in the way a friend would. With the other organisations visited, while people were of course "friendly", one felt as if one was much more in a measured professional relationship.

Uphoff asserts that *leadership* is the other quality needed to generate social energy. Leaders produce or articulate ideas that others will accept. With good clear and well articulated ideas people believe that their contribution of resources and effort will help achieve worthwhile goals. While leaders also carry out a host of other functions, most of which are repeatedly expounded in business schools

throughout the world, it can be forgotten that leaders produce, or at least articulate, ideas others accept and respect (Uphoff 1996: 385-6).

A leader may appeal to self-interested or community minded ideals so long as they offer the possibility of a better future or defending the status quo against a worse alternative. People are more likely to invest effort in enterprises that are not only comprehensible but also offer a worthy and desirable outcome (Uphoff 1996: 386).

In addition to this leaders usually nurture friendship, either personal friendship or through a group that offers identity, security and other benefits.

With Nijera Shikhi leadership originally came from its founder, John Hastings. He combined the ideas and ideals behind Nijera Shikhi, as a people's movement, in such a way that they are accepted and respected at many levels in Bangladeshi society, but especially at the grass roots. Nijera Shikhi also offers friendship. In conducting this research one was often told that it would be all right to visit a village where there are Nijera Shikhi groups - "no-problem: we are all part of a people's movement, they will look after us and help us" (numerous personal communications, July 1997) - amazingly it always turned out to be true!

When ideas, ideals and friendship are combined with effective leadership the resulting social energy can be a powerful force. On the first visit in Bangladesh (previously mentioned in chapter 4) to trial the test for functional literacy, we travelled first to Satkira. From there Ashok, the Nijera Shikhi staff member went to Kaloroa to seek the help of the local Nijera Shikhi organiser there. He returned with the news that he was away but due back soon and that he thought things would be OK. At this point all the stories told about the impossibility of testing literacy after a course had finished started to pass through my mind. The next day we moved to Kaloroa - the centre for that Thana. From there we travelled out to Ramvaddrapur - about 11 km by van rickshaw. For the last two or three kilometres the rickshaw had to be pushed most of the way as the track was too rough or too muddy in many places. We arrived at the village at 4.45 p.m. just before the women's group should have finished. The women stayed for another two hours for us to do our work. We then did some work with the men's group but anxiety was growing about the journey back as the road was not considered safe at night due to the incursion of bandits over the border from India. Leaving in the pitch dark with no moon most of the members of the men's group insisted on coming with us for the first few kilometres until the track was a good one. Around each rickshaw were several men pushing rather than allowing us to walk. Ahead of us the track was lit by four or five men with hurricane lamps. One village we sped through asked what all the excitement was about - the men shouted back "we are going to a wedding!" Mehub, the

interpreter, was amazed by it all and commented that people would never be doing this if they were being paid!

People's movements and social energy

The power of self-fulfilling prophecies is well known. What people expect is more likely to happen with the reverse dynamic having even more power - what is thought of as not being possible becomes impossible.

This is particularly true with the idea of voluntary service and social energy. If these are regarded as being impossible they will not occur. In Dewangonj the response of one of the ActionAid staff to the question of what would happen if the facilitators were not paid an honorarium, was to laugh at the suggestion and to say, "no-one would do the job, why should anyone do such work if they are not getting anything for doing it?" (personal communication, Md. Saidul Islam, Monitoring and Evaluation Co-ordinator, 20/7/97). When the same question was put to Prof. Rokeya Rahman Kabeer, whose organisation has engaged in literacy work with around 100,000 people, her response was: "no that wouldn't work - we need a long term commitment from our facilitators as our courses last for eighteen months. You can't get that from volunteers" (personal communication, Rokeya Rahman Kabeer, founder of Saptagram Nari Swanirvar Parishad, 3/8/97). Yet Nijera Shikhi already has 30,000 such volunteers.

One of the crucial elements here is the role of expectations. If voluntary service is expected to be given freely, without a second thought, then it is more likely that this will happen. If it is not thought to be possible then it is unlikely to occur. There is a parallel with the role that expectations can play in macroeconomics. A reduction in consumption can lead to an increase or a decrease in national income depending on people's expectations. If there is optimism in the economy - the "feel good factor" - then increased savings will more quickly be channelled into investment, leading to a growth in output via the accelerator and the multiplier. If there is pessimism, the process is reversed.

Coupled to differing expectations there needs to be an understanding of people's behaviour. Persistent patterns of behaviour are best explained by "structural" explanations which rely on understandings of roles created by common expectation. Innovative change is best accounted for by "cognitive" theories where people are influenced by ideals, ideas and values (Uphoff 1996: 330). For innovation to be sustained it needs structural and therefore institutional changes to create new roles and expectations.

A people's movement may be in a better position to do this than an international NGO, or even the government, both of which at times can take on the role of paternalistic philanthropy. In addition to

this, many international NGOs and some third world government's management staff are very highly paid, especially when compared to the people they are working with. In this situation it is more difficult to devise plans and set up institutions that expect freely given voluntary service, as this may not be the planners and managers main motivation. We have seen that as Structuralist explanations of behaviour predict, people in these positions may even have lost sight of the possibility of the type of generosity and altruism that is needed to generate social energy.

Institutionalising altruism

Nijera Shikhi, by establishing itself as a people's movement, based on voluntary service and generosity, is institutionalising changed expectations and roles. It is starting to rehabilitate the type of voluntary service derived from altruism which can be a valuable element in development. In doing so, it is helping to counterbalance some development practices based on self-interest models of human behaviour. People do act out of self-interest, but they don't only act out of self-interest, they also act out of generosity. Self-interest can be harnessed to produce large social benefits, but it is not the only way this can be done.

At Gal Oya, Uphoff notes how when farmers started to value others' welfare new possibilities opened up. It was not so much that old ways of thinking were being abandoned, but that the repertoire was being enlarged (Uphoff 1996: 288-9). Neither is it the case that people are either selfish or generous. Most people are both selfish and generous but the probability of them acting in a selfish or a generous way can be changed. Changing expectations helps to change these probabilities. Our decisions are based on our values and those of other people. Changing people's values is not the issue, we all have many different values to draw on. What is important is which values are activated in a given situation. The logic for collective action changes when people attach some value to the well-being of others (Uphoff 1996: 337-8).

In establishing a people's movement where altruism, generosity, voluntary service and valuing the welfare of others is the expected norm, Nijera Shikhi is increasing the probability of these occurring. In addition to this it is creating institutional structures and roles which structural explanations of behaviour predict are likely to perpetuate such actions. Such a movement is more likely to generate social energy and be able to use this as a resource for development.

11. Does Nijera Shikhi's Methodology differ from that of others?

Calculations of the likely cost effectiveness of Nijera Shikhi have shown that it may be costing between a tenth and a thirteenth the cost of government schemes to produce a literate person with the probability of their being significant additional benefits. This difference in performance is of such a magnitude one is bound to examine not just the different techniques and methods being used, as these by themselves would hardly account for such an improvement, but also the different methodologies of planning and management being used.

Conventional planning methodology

Adams (1988) in surveying the articles related to educational planning which have appeared in *Comparative Education Review* discerns two main streams in the planning discourse literature. One derives its methodology from economics "the methodologies of educational planning are drawn from economics.." (Adams 1988: 401). The other stream uses a broader political economy approach which recognises wider institutional factors involved in planning and decision making ".the institutional school of economics that uses ideas from a variety of social sciences to explain how institutions behave" (ibid.: 402).

Both of these streams of educational planning have in common: a methodology derived from social sciences and based on Newtonian physics. This tends to see the world as a series of mechanistic relationships. Different inputs have to be combined in order to produce a certain output. Planning tries to understand the precise nature of these relationships, to combine resources in the most effective way possible, in order to maximise the outputs from a given level of inputs. In Newtonian physics the effectiveness of a machine is reduced by friction and entropy. Good engineering seeks to reduce these effects by better design and using appropriate leverages. In the same way good educational planning derives systems which minimise social and educational friction and which optimise appropriate combinations of inputs (see World Bank 1995 and Colclough 1993 as an example of this). Such models can, at times, come close to "social engineering" (see Adams 1988: 406).

Such a way of thinking undoubtedly has immense value. It has been responsible for many scientific advances as well as for deepening our understanding of society. However, it also has deficiencies.

Economies have done things economists thought impossible such as combining increasing inflation with increasing unemployment. To Ormerod (1994), the problem is that economists see the economy as a machine, believing they have to discover the precise mechanical relationships which govern it. When they make a mistake it simply means they have not yet understood the relationships correctly.

He argues that it is better to see the economy as a living organism which, when stimulated, might react in one way, the opposite, or not at all.

In educational planning Verspoor likewise notes that "The model is attractive in that it forces the planner to present problems and define priorities in a clear and structured way...it is supposed to provide unambiguous guidance on the efficient allocation of scarce resources" (Verspoor 1992: 235). However, he continues: "Yet the model stubbornly refuses to perform" (ibid.: 235). Psacharopoulos (1986) also lists a series of educational planning mishaps where planners have produced policy prescriptions which, with hindsight, may have been the opposite of what was most desirable.

Newtonian relationships hold up well for physicists examining phenomena at above atomic levels. However when physicists look at sub-atomic phenomena they find that these relationships break down. For instance classifying phenomena into mutually exclusive categories is challenged by the observation that electrons appear alternatively and simultaneously as particles and waves, as matter and as energy. In order to understand these relationships physicists have, over the last fifty years, been deriving a new methodology. Mirowski (1989) finds the current methodology of economics inadequate as it fails to incorporate the post-Newtonian thinking of the new physics. Uphoff finds post-Newtonian thinking more helpful in aiding understanding of the happenings at Gal Oya.

"This new body of theory explores different kinds of order and causation that are non-linear and only loosely determinant, finding surprising patterns in the dynamics of open systems that match human realities better than the closed-system reasoning of classical physics" (Uphoff 1996: 14).

It is from this new way of thinking, loosely described as "chaos theory", that it may be possible to enlarge the planning methodology of non-formal education in a way which aids our understanding of Nijera Shikhi.

Elements of a new methodology

Many of the elements of thinking derived from the new physics which Uphoff (1996) finds helpful in understanding Gal Oya are equally helpful for understanding Nijera Shikhi and in explaining its astonishing effectiveness. They are as follows:

The use of "both-and" thinking as well as "either-or" thinking. Just as electrons appear alternatively and simultaneously as waves and as particles, as energy and as matter, so education should be seen as both a consumption and an investment good, as both a cause and a consequence of increased income. Helping learners is best seen as both leisure and work. People are motivated by both self-interest and by the welfare of others.

If people see education as consumption and not just as an investment, then this means they enjoy it. When people do something which is enjoyable they are more likely to continue. If they also see it as an investment - providing future benefits - they have even more reason to continue. The way economists classify goods as either consumption or investment combined with the development of "Human Capital Theory" has had the unfortunate effect of hiding from educational planners the importance of education being enjoyable. This is especially true of education with adults. Nijera Shikhi has a system which is both enjoyable and effective, where achievement is immediate - a sentence is written in the first lesson (see page **Error! Bookmark not defined.**) - and which provides high future returns.

Likewise classifying an activity as either work or leisure and as seeing self-interest as the only, or the main, motivating force, can turn helping others into work - something which almost by definition is "hard", to be paid for and to be grumbled about. So helpers and teachers can become de-motivated and less effective.

Resources are viewed not just as a stock but also as a flow. Conventional planners seek to combine inputs in the best way to produce the greatest possible outputs. Resource inputs such as text books, teacher hours, buildings and classroom furniture are viewed as stocks. They are finite and once used one has produced all that is possible. It has already been noted that a critical resource for Nijera Shikhi is "social energy"; this is best seen as a flow rather than a stock. Paradoxically, in using it one doesn't use it up, as with a stock, but one can nurture more, as with a flow. Generative goods (see chapter 10) are better seen as flows. In a similar way nuclear physics allows nuclear fuel to be used to generate even more fuel while simultaneously been "used" to produce energy.

The use of "open" as well as "closed" systems. An open system sets no boundaries on the outcomes, a closed system has more or less definite boundaries which are often determined by the stock of inputs. Planets orbit the sun along fixed and predictable paths in a closed system. Electrons orbit a nucleus in shifting orbits gaining or giving up energy as they do so in a more open system. Similarly a flow of social energy can be increased as well as decreased, opening up numerous possibilities. With closed systems friction has to be reduced to improve efficiency. With open systems small changes are magnified exponentially to produce larger effects. Organisers respond to Nijera Shikhi's publicity, they gather together a hundred would be literates who start learning, soon more people wish to learn and a growing movement for mass education in an area is being started. Often these people additionally teach younger siblings and friends. Open system thinking is being utilised alongside closed systems of bureaucratic thinking.

The whole is greater than the sum of the parts. An atom has properties greater than those of its parts: protons, neutrons, electrons, muons, gluons and quarks. A molecule is more than its constituent atoms; an organ is more than its cells and people are much more than the sum of their organs (Uphoff 1996: 313). In the same way when people work together, in open as well as closed systems and relationships, with resources that are flows as well as stocks, the whole and its possibilities are greater than the sum of the parts. On one level Nijera Shikhi is a few learners and helpers with some books in a few thousand villages; but it is also more than this. It is a resource for increased productivity, for improved health and for greater awareness of women's and human rights. Its nurturing of social energy creates many additional possibilities.

Identifying small actions which produce large changes. One of the images associated with chaos theory is that of a butterfly flapping its wings in the Pacific and so causing a hurricane in the Atlantic. The image is powerful but beyond most people's comprehension. An alternative is that of a log-jam. To free a log-jam in a river the trick is to free one or two critical logs near the front of the jam to enable the movement of the rest. In Nijera Shikhi one or two critical actions are taken: nurturing the flow of social energy, developing effective methods of self-education. From this a growing movement for self-education is created with enormous development spin-offs, which are out of proportion to the initial actions.

Synergy of purpose. The fact that people are only involved with Nijera Shikhi because they want illiterates to become literate, eliminates the need for many management tools which in other organisations use valuable resources. People don't have to be monitored to check that they are helping in the classes - receiving the pay without doing the work - simply because they all share the same goal of literacy. This eliminates any temptation to distort test results or to substitute better testees.

While these may form some of the elements of a new methodology for non-formal education it is interesting to note the basic criteria of educational planning have not been abandoned. Plans and models will still be judged, amongst other things, on their ability to make the best use of scarce resources. In this regard it is also interesting to note that Nijera Shikhi's likely costs of between one tenth and one thirteenth of the government's programmes is remarkably similar to the claims of a project in Indonesia where using social energy, 48,000 hectares of land were terraced at a twelfth of the cost of government programmes (Uphoff 1996: 373).

12. Conclusions

A number of conclusions can be drawn from this research as follows:

Good quality literacy work with adults, can play a valuable part in development. The evidence presented in chapter 8 indicates that after becoming literate, people have much greater self-confidence, increasing their ability to make substantial changes in many areas of their lives. This can result in greater productivity leading to sizeable increases in income. From the small sample of data collected this could be in the region of 84% for men and 200% for women. These figures should only be taken as indicative of what is possible. Further research is needed to verify them.

Whilst it is premature to calculate a rate of return for adult literacy work, the data collected indicates this could be very high. Indications are that for a scheme with a unit cost of Tk. 85 per learner and Tk. 116 per neo-literate the annual income per neo-literate could have increased by an average of Tk. 4800 for male learners and Tk. 1590 for female learners. Again these figures are indicative of what is possible rather than what is generally the case. They are derived from Nijera Shikhi, which seems to be a particularly low cost and effective literacy movement. However, they do indicate that further research in this area is needed.

Well constructed literacy schemes bring other benefits which help fulfil broader developmental goals. Environmental improvement, improved health practices, increased school attendance and helping others become literate and numerate, are some of the benefits confirmed by this research.

ActionAid with its REFLECT programme has recently gained considerable attention for its pioneering literacy work. The high cost of this work has been justified on the grounds that firstly: it is effective in generating retained literacy skills when primer based methods are not, and secondly: it "empowers" people, which the acquisition of literacy by itself does not.

This research shows both of these assumptions to be questionable, and that it is possible to bring both retained literacy and changes in people's lives, through, for example, lower cost people's movements. For this to happen, the way people learn, the content of their courses and the type of organisation they learn with, are likely to be as important as the acquisitions of literacy and numeracy skills.

The contribution of People's Movements, using self-education and the resource of "social energy", to literacy and development in general, should be given greater attention. Data from this research shows

that between ten and twenty people could be enabled to become literate for every one person literated by the government or NGOs.

The difficulties Nijera Shikhi experiences in resourcing its work indicates that donors need to be more flexible in their approaches to people's movements. They need to develop the capacity to identify quickly those movements which are effective and should be supported. They also need to develop the ability to give adequate funding for their work without killing their essential elements with over-funding.

Finally, educational planners need to expand their planning methodologies, especially in the area of non-formal education. This will mean incorporating thinking which utilises post-Newtonian as well as Newtonian ideas: seeing resources as flows as well as stocks, appreciating the whole as more than the sum of its parts, looking for small actions with large consequences and using "both-and" as well as "either-or" ways of thinking.

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ANNEXES

Annex 1 Outline of the initial test used based on Ziegahn (1992)*Reading test*

Q	Description	Procedure	Max. score
1	Respond to 4 simple words each on a card	If 2 right then to Q2, if not then to writing test	4
2	Respond to 3 simple signs on a card - to be read and say where they can be found	If 3 right then to Q3	6
3	Read one sentence of text from a standard 1 reader)	2
4	Read one sentence from a standard 2 reader) If at least 3 of Q 3 to 6	2
5	Read instructions from a packet of Saline and answer three comprehension questions))	3
6	Read one sentence from a standard 4 reader (p.61)) then on to the health poster	3
7	Answer 3 questions about a health poster	Go to 7	3
8	Read a letter and answer 3 comprehension questions	Go to Writing test	7
	Maximum score		30

Writing test

Q	Description	Procedure	Max. score
1	Copy down 4 words appearing on a card	If correct then to 2	4
2	Write 3 simple words from dictation	If correct 2 correct then to 3 & 4	3
3	Take from dictation three sentences each slightly more difficult	Go to 4	9
4	Fill in a simple loan application form	Go to 5	6
5	Write a simple letter to friend	Go to numeracy test	8
	Max. score		30

Annex 2 Topics covered by Nijera Shikhi in "Let's Write"

(covering the curriculum laid down by the Government's National Textbooks Committee)

1. Family planning
2. Social justice, social reform and leadership
3. Human rights
4. Women's rights and education
5. Women's responsibilities and decision-taking role
6. Winning and keeping independence
7. Working together
8. Savings groups and credit unions
9. Local resources, skills and opportunities
10. Income generating programmes
11. Cottage industries
12. Kitchen gardening
13. Fruit cultivation
14. Tree-planting and afforestation
15. Environmental development
16. Fish breeding
17. Rearing poultry and cattle
18. Bee-keeping
19. Nutrition
20. Health and hygiene
21. Clean water and water management
22. Common diseases and their prevention
23. First aid
24. Use and misuse and dangers of drugs
25. Pregnancy
26. Child care.
27. Human development
28. Family life
29. Marriage and divorce
30. Local and national government - scope, structure etc.

Annex 3 Nijera Shikhi's Costs per Learner

Analysis of costs per 100 learners

Organisers / Union Parishads / Local committees are advised to make local provision for the following class costs for 100 learners in five classes (two at night) served by 10 Helpers (two per class)

ITEM	COST PER ITEM	NUMBER	TOTAL COST
Slates	4	100	400
Chalk (boxes)	5	40	200
Exercise-books (80pp)	5	310	1550
Pencils	2.5	100	250
Blackboards	50	2	100
Lamps			320
Kerosene p.m.	60	9	540
Registers for classes	10	5	50
Savings groups	12	5	60
Library	15	2	30
TOTAL			3500

UNIT LEARNER COST = Tk. 35

Value of Helpers and Organisers time

48,000

Total value of local contribution

51,500

is 91.15% of total programme costs

INPUTS BY NIJERA SHIKHI (for 100 learners and 10 Helpers)

to be raised from external donors

ITEM	COST (Taka)	NUMBER	TOTAL
Helpers' Guide-books	20	5	100
Class Manual	15	10	150
Primer "Ja Chai"	6	110	660
2nd Stage Reader "Disha"	4.5	110	495
2nd Stage Arithmetic Manual	10	5	50
2nd Stage Writing Manual	20	5	100
Test Papers	0.5	100	50
Mini-library case (steel)	175	1	175
set of books	750	1	750
Certificates for learners	1	100	100
Certificates for Helpers	1.5	10	15
Sub total			2645

Costs of servicing, training, travelling, staff, management, administration, publicity, dispatch, communications, postage and so on

2,355

TOTAL COST

5,000

UNIT LEARNER COST = Tk. 50

is 8.85% of total program costs if value of voluntary labour is included

ANNEX 3 (page 2) Budget Breakdown

ITEM	Cost in Tk.'000s per 330,000 learners	Cost in Tk.'000s per 1m learners	Cost in £ per 1m learners	Cost in US\$ per 1m learners
Books for learners and volunteers at 26.45 per learner (see approx. B)	8,808	26,450	372,542	601,147
New book publications	100	300	4,230	6,825
Book stocks (adv. printing)	260	781	10,997	17,745
Furniture, fixits, A/C, fans	246	739	10,405	16,790
Personnel: Salaries & Hon.	1,640	4,925	69,365	111,930
Agents' Allowances	425	1,276	17,976	29,006
Consultant	60	180	2,538	4,095
Training	2,000	6,006	84,592	136,500
Workshops, seminars	122	366	5,160	8,327
Office Equipment	280	841	11,843	19,110
Vehicles (moped; microbus)	400	1,201	16,918	27,300
Travel, TA, and Fuel	239	718	10,109	16,312
Agents' travel	317	952	13,408	21,635
Consultant's UK travel and rent	168	505	7,106	11,466
Office exes: Rent and utilities	217	652	9,178	14,810
Stationary	81	243	3,426	5,528
Forms, formats, circulars	150	450	6,344	10,238
Postage, dispatch	210	631	8,882	14,333
Hospitality & Meetings	12	36	508	819
Records, accounts, audit	65	195	2,749	4,436
Maintenance and repairs	41	123	1,734	2,798
Depreciation	120	360	5,075	8,190
Contingencies	260	781	10,997	17,745
Publicity	100	300	4,230	6,825
Creative writing	50	150	2,115	3,413
Planning, Monitoring, eval, rectmt.	63	189	2,665	4,300
Incentives / rewards for volunteers	66	198	2,792	4,505
Reserve for extra supplies to classes (e.g. library and exercise books.)	150	450	6,344	10,238
TOTAL	16,650	50,000	704,225	1,136,366
<i>Cost per learner from external funds</i>		<i>50</i>	<i>0.70</i>	<i>1.14</i>
Additional costs to be met locally (see annex 3 page 1)	11,655	35,000	492,957	795,455
<i>Costs per learner met locally</i>	<i>0.035</i>	<i>0.035</i>	<i>0.49</i>	<i>0.80</i>

NB. some figures have been rounded off. Exchange rate of £1= Tk. 71 and \$1 = Tk. 44 used

Annex 4 Cost of REFLECT Programme

**Cost per year for 5 REFLECT centres with 20 learners (in Taka):
A case from Tikkapara Project**

Direct Cost	
Facilitator's honorarium	5850
Facilitator's training	3600
Facilitator's workshop	3250
Facilitator's manual	750
Visual cards)
Learner's notebooks)
Blackboard and chalk)
Thick markers)
Pen, pencils, sharpeners and erasers) 10000
Supplementary reading materials	1500
Centre cost	22500
Total	47450

Indirect Cost	
Trainer's/Co-ordinators Salary	24000
TOT (Training of Trainers)	10500
Development of local manual	2500
Total	37000

TOTAL	84450
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• **Cost for one centre with 20 learners:** **Tk. 16890**

Enrolment: 100 Learners
Drop-out: 29 Learners

• **Unit Cost before drop-out:** **Tk. 844**
• **Unit Cost after drop-out:** **Tk. 1189**

Source: RCU Dhaka. July 1997

COST PER LEARNER IN A REFLECT CIRCLE (Rural)

DIRECT COST per circle of (25 participants) in pounds sterling

110	Facilitator's honorarium
12	TOF (Training of Facilitators)
12	Fortnightly workshop for facilitators
2	Local manual
2	Visual cards
12.5	Participants' notebook
12.5	Flip-chart paper
5	Box of tick markers (sign pen)
8	Blackboard
10	Pens/pencil/sharpeners/erasers/chalk
5	Facilitator's bag/umbrella
10	Supplementary reading materials
<hr/>	
201	Approx. £8.04 direct cost per participant Tk. 571 @ Tk. 71 per pound sterling

INDIRECT COST in pounds sterling

1900	Trainers / Co-ordinators
170	TOT (Training of Trainers & Co-ordinators)
150	Development of local manual & background research
150	Development of local visual cards
50	Whiteboard / markers etc. for training
80	Bicycles
<hr/>	
2500	

Assume this capacity can cover a minimum of 30 circles. = approx. £83 per circle.
If each circle has 25 participants then this is:

£3.32 = Tk. 236 per learner for indirect costs.

Total cost per learner is £ 11.36 = Tk. 807 per year

Source: RCU Dhaka, July 1997. Exchange rates updated

Annex 5 Numeracy and Literacy Test Data for Nijera Shikhi

Summary of test results

Place	Gender	Months since course end	Number of students who :			Number who tested functionally			Estimate of Func Lit.& Num
			started	finished	tested	Lit.	Num.	Lit.& Num.	
Binshara	M	18	20	16	14	14	14	16	
Moheshrohali	M	18	20	16	16	15	16	15	
Penguary	F	18	20	12	10	10	10	12	
Kundaeel	F	12	20	13	7	5	5	15	
Laluamagira	F	18	20	18	15	12	11	15	
TOTAL			100	75	62	56	56	54	73

Percentage of those tested who were functionally literated and numerate = 87%

Percentage of those tested who were at least literated and numerate = 100%

Note: Estimate of functional literacy for the whole group takes account of those not tested but who were estimated as literate and numerate by the teacher and of those who just failed the test by one or two marks in one section, but whose combined mark is good and who are probably functionally literate and numerate.

Test Score Sheet		Place	Binshara		Course started		:Jan 95				Test date and time		27/7/97 8-10pm										
		Gender	Male		Course finished		:Jan 96																
No started course		20	No finished course		16	No tested		14	No present		14												
W	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Average	
1	6	6	6	6	5	6	5	6	3	6	6	5	6	6	6							5.57	
2	9	9	8	8	8	9	8	9	3	8	8	8	9	9	9							8.07	
3	10	8	9	9	8	7	9	8	0	7	8	8	8	10	9							7.71	
Total	25	23	23	23	21	22	22	23	6	21	22	21	23	25	24							21.36	
As %		92	92	92	84	88	88	92	24	84	88	84	92	100	96							85.43	
Pass		1	1	1	1	1	1	1	0	1	1	1	1	1	1							13.00	
R & U																							
1	9	9	6	9	8	9	9	9	9	9	9	9	9	8	9							8.6	
2	9	9	7	6	6	9	6	6	6	6	6	8	8	8	9							7.1	
3	7	7	7	7	7	7	6	5	4	5	5	6	7	7	7							6.2	
Total	25	25	20	22	21	25	21	20	19	20	20	23	24	23	25							22.0	
As %		100	80	88	84	100	84	80	76	80	80	92	96	92	100							88.0	
Pass		1	1	1	1	1	1	1	1	1	1	1	1	1	1							14.0	
Literate		1	1	1	1	1	1	1	1	1	1	1	1	1	1							14.0	
N																							
1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2							2.0	
2	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	4						3.8	
3	4	4	4	4	4	3	4	4	4	4	4	4	4	4	4							3.9	
4	10	10	10	10	10	10	10	10	10	10	10	9	10	10	10							9.9	
Total	20	20	20	20	20	19	20	20	20	20	20	18	19	19	20							19.6	
As %		100	100	100	100	95	100	100	100	100	100	90	95	95	100							98.2	
Numerate		1	1	1	1	1	1	1	1	1	1	1	1	1	1							14.0	
Overall	70	68	63	65	62	66	63	63	45	61	62	62	66	67	69							63.0	
As %		97	90	93	89	94	90	90	64	87	89	89	94	96	99							90.0	
Num & Lit		1	1	1	1	1	1	1	1	1	1	1	1	1	1							14.0	
Number classified as literate =						14 out of		14		Note learner 8 classed as literate in spite of failure of writing test due to disability													
Number classified as numerate =						14 out of		14															
Number classified as Num. & Lit. =						14 out of		14															

Test Record Sheet		Place	Binshara		Course Started		Jan-95		Tested		27/7/97 8-10pm	
		Gender	Male		Course finished		Jan-96					
No started course		20	No finished course		16	No tested		14	No present		14	
Learner	Name	Age	Children	Sibs	Income	Job	Fam Lit	L&N	Score %			
					Tk							
1	Md. Abdus Salam	24	1	2	1200	Business	N	1	97			
2	Md. Tofer Ali	33	2	7	600	Farmer	Y	1	90			
3	Md. Abbas Ali	35	3	4	650	Farmer	Y	1	93			
4	Abdul Latif Mirza	25	0	3	900	Rk Van Driver	Y	1	89			
5	Md. Iqbal Hossain	44	4	5	500	Fisherman	Y	1	94			
6	Md. Shajahan Ali	27	1	6	1000	Farmer	Y	1	90			
7	Md. Moti-Ur-Rahman	24	1	10	500	Student	Y	1	90			
8	Md. Abdul	22				Farmer	N	1	64			
9	Md. Khalilur Rahman	35	6	4	700	Farmer	Y	1	87			
10	Md. Muzammel Huq	25	0	5	600	Farmer	N	1	89			
11	Md. Yunus Ali	27	1	7	400	Farmer	Y	1	89			
12	Md. Kashem	38	2	2	450	Farmer	N	1	94			
13	Md. Abdul Mannan	35	2	7	450	Farmer	Y	1	96			
14	Md. Sultan	36	2	5	500	Farmer	Y	1	99			
15												
16												
17												
18												
19												
20												
Average			31						90			
Stand. Dev			7						8			
Note: The evening of the test was after a market day so the class met an hour later than usual.												
This combined with the presence of a local circus meant two students were absent from the group.												
The helper estimated their standard to be comparable to that of the other students.												

Test Score Sheet		Place	Moheshrohali				Course started				:Jan 95				Test date and time				28/7/97 8-10pm			
		Gender	Male				Course finished				:Jan 96											
No started course		20	No finished course				16	No tested		16	No present				16							
W	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Average
	1	6	6	6	6	5	6	6	6	5	6	6	5	6	6	6	6	8				5.8
	2	9	9	9	9	6	8	6	9	9	8	9	6	9	6	8	9	8				7.9
	3	10	10	10	10	7	7	10	10	8	9	10	6	8	8	10	10	9				8.9
Total	25	25	25	25	18	21	22	25	22	23	25	17	23	20	24	25	25					22.5
As %		100	100	100	72	84	88	100	88	92	100	68	92	80	96	100	100					90.0
Pass		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					16.0
R & U																						
	1	9	9	6	6	3	9	3	9	9	9	9	6	9	9	9	9					7.5
	2	9	9	6	6	9	9	6	9	9	6	9	6	6	6	6	6					7.3
	3	7	7	7	7	7	3	7	7	7	7	7	6	5	6	6	6					6.4
Total	25	25	19	19	19	25	12	25	25	22	25	19	21	20	21	21	21					21.2
As %		100	76	76	76	100	48	100	100	88	100	76	84	80	84	84	84					84.9
Pass		1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1					15.0
Literate		1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1					15.0
N																						
	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2					2.0
	2	4	4	4	4	4	3	4	4	4	4	4	4	4	4	4	4					3.9
	3	4	4	4	4	4	3	4	4	4	4	4	4	4	4	4	4					3.9
	4	10	10	10	10	10	10	10	10	10	7	7	10	10	10	10	10					9.6
Total	20	20	20	20	20	20	18	20	20	20	17	17	20	20	20	20	20					19.4
As %		100	100	100	100	100	90	100	100	100	85	85	100	100	100	100	100					97.1
Numerate		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					16.0
Overall	70	64	64	57	66	52	70	67	65	67	53	64	60	65	66	66						63.1
As %		100	91	91	81	94	74	100	96	93	96	76	91	86	93	94	94					90.2
Num & Lit		1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1					15.0
Number classified as literate =						15 out of				16												
Number classified as numerate =						16 out of				16												
Number classified as Num & Lit =						15 out of				16												

Test Record Sheet		Place	Moheshrohali				Course Started				Jan-95				Tested				28/7/97 8-10pm			
		Gender	Male				Course finished				Jan-96											
No started course		20	No finished course				16	No tested		16	No present				16							
Learner	Name	Age	Children	Sibs	Income	Job	Fam Lit	L&N	Score %													
					Tk																	
1	Md. Yar Mahmood	20	0	13	1000	Businessman	N	1	100													
2	Md. Abdul Awal	18	0	5	800	Farmer	Y	1	91													
3	Md. Amirul Islam	12	0	3	1000	Farmer	Y	1	91													
4	Md. Zahurul Islam	12	0	7	500	Farmer	Y	1	81													
5	Md. Gonzer Ali	27	1	7	500	Farmer	Y	1	94													
6	Md. Habibur Rahman	30	2	10	400	Farmer	Y	0	74													
7	Md. Afzal Hossain	25	0	5	2200	Farmer	Y	1	100													
8	Md. Monirussaman	17	0	13	100	Farmer	Y	1	96													
9	Md. Alauddin	30	0	5	1200	Farmer	Y	1	93													
10	Md. Ayub Ali	16	0	4	500	Farmer	N	1	96													
11	Md. Faraz Ali	20	0	2	600	Farmer	N	1	76													
12	Md. Rezaul Karim	12	0	9	600	Farmer	Y	1	91													
13	Md. Shariful	12	0	5		Farmer	Y	1	86													
14	Md. Abdul Majid	18	1	2	500	Farmer	Y	1	93													
15	Md. Jahangir Alam	12	0	2	500	Farmer	Y	1	94													
16	Md. Rezaul Karim	15	0	7	400	Farmer	N	1	94													
17																						
18																						
19																						
20																						
Average						19								91								
Stand. Dev						7								7								

Test Score Sheet		Place	Penguary				Course started				:Jan 95		Test date and time				28/7/97 8-10 am					
		Gender	Female				Course finished				:Jan 96											
No started course		20	No finished course				12	No tested				10	No present				12					
W	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Average
1	6	6	6	3	6	5	5	5	6	6	5	6	6									5.7
2	9	9	9	8	8	8	7	8	7	8	8	9	9									8.2
3	10	10	9	8	9	7	7	8	7	9	9	10	9									8.5
Total	25	25	24	22	23	20	19	21	20	23	22	25	24									22.3
As %		100	96	88	92	80	76	84	80	92	88	100	96									89.3
Pass		1	1	1	1	1	1	1	1	1	1	1	1									12.0
R & U																						
1	9	9	9	9	9	9	9	6	6			8	6									8.0
2	9	6	6	6	6	6	9	9	9			9	6									7.2
3	7	5	5	5	6	6	7	7	7			7	7									6.2
Total	25	20	20	20	21	21	25	22	22			24	19									21.4
As %		80	80	80	84	84	100	88	88			96	76									85.6
Pass		1	1	1	1	1	1	1	1			1	1									10.0
Literate		1	1	1	1	1	1	1	1			1	1									10.0
N																						
1	2	2	2	2	2	2	2	2	2			2	2									2.0
2	4	4	4	4	4	4	4	4	4			4	4									4.0
3	4	4	4	4	4	4	3	4	3			4	4									3.8
4	10	10	10	10	10	10	10	10	10			10	10									10.0
Total	20	20	20	20	20	20	19	20	19			20	20									19.8
As %		100	100	100	100	100	95	100	95			100	100									99.0
Numerate		1	1	1	1	1	1	1	1			1	1									10.0
Overall	70	65	64	62	64	61	63	63	61			69	63									63.5
		93	91	89	91	87	90	90	87			99	90									90.7
Num & Lit		1	1	1	1	1	1	1	1			1	1									10.0
Number classified as literate =						10 out of				10		Note: 2 students not fully tested due to tester's oversight.										
Number classified as numerate =						10 out of				10												
Number classified as Num & Lit =						10 out of				10												

Test Record Sheet		Place	Penguary		Course Started		Jan-95	Tested		28/7/97 8-10 am	
		Gender	Female		Course finished		Jan-96				
No started course		20	No finished course		12	No tested		10	No present		12
Learner	Name	Age	Children	Sibs	Income	Job	Fam Lit	L&N	Score %		
						Tk					
1	Khadizatul Kobra	12			2	Student	Y	1	93		
2	Lipi Parveen	14			4	Student	Y	1	91		
3	Habiba Khatun	10			4	Student	Y	1	89		
4	Rasheeda Khatun	10			4	Student	Y	1	91		
5	Rasheeda Khatun	8			2	500 Student	Y	1	87		
6	Parul Khatun	12			8	Tailor	Y	1	90		
7	Emirina Khatun	13			5	700 Household	Y	1	90		
8	Golenoor Begum	26	1		7	700 Housewife	Y	1	87		
9	Taheera Begum	25	2		6	600 Housewife	Y				
10	Shaheeda Begum	25	3			Housewife	Y				
11	Mahfuza Khatun	16			4	Student	Y	1	99		
12	Mashrufu Parveen	23			6	Student	Y	1	90		
13											
14											
15											
16											
17											
18											
19											
20											
Average			16						91		
Stand. Dev			7						3		
Note: 2 students not tested due to tester's oversight.											
8 students dropped out who were day labourers and needed to work. They did 2.5 months of the course and intend to re-start.											

Test Score Sheet		Place	Laluamagira		Course started		:Dec 94				Test date and time		29/7/97 8-10 am									
		Gender	Female		Course finished		:Dec 95															
No started course		20	No finished course		18	No tested		15	No present		15											
W	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Average
	1	6	5	6	6	5	6	6	6	6	5	6	5	6	6	6	5					5.7
	2	9	8	7	8	8	8	9	9	9	8	7	6	6	9	6						7.9
	3	10	7	6	9	8	8	9	8	9	8	7	8	5	5	7	0					7.4
Total		25	21	18	23	22	21	24	23	24	23	20	21	16	17	22	11					21.1
As %		84	72	92	88	84	96	92	96	92	80	84	64	68	88	44						84.3
Pass		1	1	1	1	1	1	1	1	1	1	1	0	1	1	0						13.0
R & U																						
	1	9	9	9	9	9	6	9	9	9	3	9	9	9	9	6						8.4
	2	9	9	9	9	9	9	9	9	9	6	6	6	9	9	6						8.4
	3	7	7	7	7	7	7	7	7	7	7	5	4	6	6	4						6.5
Total		25	25	25	25	25	22	25	25	25	16	20	19	24	24	16						23.2
As %		100	100	100	100	100	88	100	100	100	64	80	76	96	96	64						92.9
Pass		1	1	1	1	1	1	1	1	1	0	1	1	1	1	0						13.0
Literate		1	1	1	1	1	1	1	1	1	0	1	0	1	1	0						12.0
N																						
	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2						2.0
	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3						4.0
	3	4	4	4	4	4	4	4	4	3	4	2	4	4	4	4						3.6
	4	10	10	10	3	10	10	10	10	5	10	8	10	10	10	6						9.0
Total		20	20	20	13	20	18	20	20	14	20	16	20	20	20	15						18.6
As %		100	100	65	100	90	100	100	70	100	80	100	100	100	100	75						93.2
Numerate		1	1	0	1	1	1	1	0	1	0	1	1	1	1	0						11.0
Overall		70	66	63	61	67	64	66	68	63	68	52	61	55	61	66	42					62.9
As %		94	90	87	96	91	94	97	90	97	74	87	79	87	94	60						89.9
Num & Lit		1	1	0	1	1	1	1	0	1	0	1	0	1	1	0						10.0
Number classified as literate =						12		out of		15												
Number classified as numerate =						11		out of		15												
Number classified as Num & Lit =						10		out of		15												

Test Record Sheet		Place	Laluamagira		Course started		Dec-94		Tested		29/7/97 8-10 am	
		Gender	Female		Course finished		Dec-95					
No started course		20	No finished course		18	No tested		0				
Learner	Name	Age	Children	Sibs	Income	Job	Fam Lit	L&N	Score %			
				Tk								
1	Salma	15		4		Household	Y	1	94			
2	Rehana Khatun	12		6		Household	Y	1	90			
3	Babita Parven	14		3		Household	N	0	87			
4	Shamima	14		6		Household	Y	1	96			
5	Runa Khatun	14		6		Household	Y	1	91			
6	Sheema Khatun	13		7		Household	Y	1	94			
7	Hafeeza Khatun	14		9		Household	Y	1	97			
8	Joba Parveen	12		8		Household	Y	0	90			
9	Juleka Parveen	15		5		Household	Y	1	97			
10	Amina Khatun	13		5		Household	Y	0	74			
11	Fahima Begum	35	3	7		Housewife	Y	1	87			
12	Farida	22	4	7		Housewife	Y	0	79			
13	Sajeda Begum	40	4	6		Housewife	Y	1	87			
14	Shabana Khatun	18	1	5		Housewife	Y	1	94			
15	Laily	30	2	8		Housewife	Y	0	60			
16												
17												
18												
19												
20												
Average				19				88				
Stand. Dev				9				10				

Annex 6 Nijera Shikhi's plan to enable Bangladesh to become literate

Schedule of possible allocation of responsibility for eliminating illiteracy by the year 2006

Figures in millions of new literates, aged over 7

Years	Nijera Shikhi Company	Self Education (Nijera Shikhi) method used by			Standard NFE programs by		TOTAL
		B/d Govt	NGOs	(total)	B/d Govt	NGOs	
a) Literacy							
1998-99	1.5	0.3	0.2	2.0	0.8	2.0	4.8
1999-2000	2.1	0.7	0.3	3.1	1.0	2.0	6.1
2000-01	2.3	1.0	0.5	3.8	1.0	2.0	6.8
2001-02	2.5	1.5	1.0	5.0	1.0	2.0	8.0
2002-03	2.5	2.0	1.5	6.0	1.0	2.0	9.0
2003-04	2.5	2.5	2.0	7.0	1.0	2.0	10.0
2004-05	2.5	3.0	2.5	8.0	1.0	2.0	11.0
2005-06	2.5	3.0	2.5	8.0	1.0	2.0	11.0
Totals	18.4	14.0	10.5	42.9	7.8	16.0	66.7
b) Mini-libraries	89,665	68,216	51,163	209,044	38,006	77,961	325011
c) People's Academies	1,380	1,050	790	3,220	580	1200	5000

Assumptions behind these figures:

If 5.3 million become literate between July 1990 and June 1998 (govt.1m NGOs 3.2m and Shiki 1.1m) then the estimated number of illiterates aged over 7 is expected to be 72.7m.

Allowing for a net total increase of 5.8m during the eight years and for the fact that by reason of age, disinterest, or impaired mental development, some 15% are not reachable, 66.7m is taken as the maximum goal.

Annex 7 List of people interviewed

- Mrs Margina Begum, Programme Officer, Nijera Shikhi, 24/7/97
- Mr. Mohini Mohan Chakrabarty, Project Director - Non-Formal Education Project Number 1, Directorate of Non-Formal Education, 3.15 - 4.15 p.m. 17/7/97
- Rev. John Hastings, founder of Nijera Shikhi, afternoons of 13&14/9/97
- Mr. Kaisarul Islam, Programme Officer, Nijera Shikhi, 24/7/97
- Mr. Md. Saidul Islam, Monitoring and Evaluation Co-ordinator - ActionAid Jamalpur, 2.30 - 8.30 p.m. 20/7/97
- Prof. Rokeya Rahman Kabeer, former professor of History at Dhaka University and founder of Saptagram Nari Swanirvar Parishad an NGO which has developed a literacy programme with destitute women, evening of 3/8/97
- Mr. Serajud Dahar Khan, REFLECT Training Co-ordinator - REFLECT Co-ordination Unit, ActionAid Dhaka, 9.00 am -10.30 am 16/7/97
- Mrs. Salima Khatun, Education Co-ordinator - ActionAid Jamalpur. 2.30 p.m. - 6.30 p.m. 20/7/97
- M. Habibur Rahman, Head of REFLECT Co-ordination Unit, ActionAid Dhaka, evening of 6/8/97
- Mr. Munsur Rahman, Programme Manager, Nijera Shikhi, 3.00 - 4.45 p.m. 14/7/97 and 2.30 - 4.00 p.m. 16/7/97
- Mr. Mirza Abdur Rob, Executive Director, Kishan Jagorani Model Sangha - a local NGO working in the Tarash area, 29/7/97
- Mr. Shajahan, Assistant Programme Officer, Nijera Shikhi, 8/7/97 & 24/7/97
- Mrs Sultana Razia, Assistant Programme Officer, Nijera Shikhi, 24/7/97
- Mrs Rezia Salam, Assistant Executive Secretary, Nijera Shikhi, evening of 9/8/97

Nijera Shikhi learners: (in order interviewed)

From first trip to Kaloroa Thana

- Mushida, aged 20, female, Ramvaddrapur village, afternoon of 7/7/97
- Laily, aged 17, female, Ramvaddrapur village, afternoon of 7/7/97
- Asia, aged 24, female, Ramvaddrapur village, afternoon of 7/7/97
- Momena Khatun, aged 16, female, Ramvaddrapur village, afternoon of 7/7/97
- Sabina, aged 17, female, Ramvaddrapur village, afternoon of 7/7/97
- Mazeda Khatun, aged 24, female, Ramvaddrapur village, afternoon of 7/7/97
- Shakhina Khatun, aged 20, female, Ramvaddrapur village, afternoon of 7/7/97
- Rahhela Khatun, female, Ramvaddrapur village, afternoon of 7/7/97

Five neo-literate females aged about 12, Parikhupee village, afternoon of 8/7/97

Three neo-literate females aged late teens to early twenties, Parikhupee village, afternoon of 8/7/97

Four neo-literate females mixed ages, Parikhupee village, afternoon of 8/7/97

Three neo-literate male farmers, Elishpur village, evening of 8/7/97

From second trip to Tarash Thana

Md. Muzammel Huq, aged 25, male, Binshara village, evening of 27/7/97

Md. Khalilur Huq, aged 35, male, Binshara village, evening of 27/7/97

Md. Abdus Salam, aged 24, male, Binshara village, evening of 27/7/97

Md. Tofer Ali, aged 33, male, Binshara village, evening of 27/7/97

Md. Kashem Ali, aged 38, male, Binshara village, evening of 27/7/97

Md. Abdul Latif Mirza, aged 25, male, Binshara village, evening of 27/7/97

Mahfuza Khatun, aged 16, female, Penguary village, morning of 28/7/97

Shaheeda Begum, aged 25, female, Penguary village, morning of 28/7/97

Mashrufu Parveen, aged 23, female, Penguary village, morning of 28/7/97

Taheera Begum, aged 25, female, Penguary village, morning of 28/7/97

Khadizatul Kobra, aged 12, female, Penguary village, morning of 28/7/97

Lipi Parveen, aged 14, female, Penguary village, morning of 28/7/97

Two new learners who had only been attending classes for a few months, Kundaeel village, afternoon of 28/7/97

Bannessa, aged 15, female, Kundaeel village, afternoon of 28/7/97

Swapana, aged 15, female, Kundaeel village, afternoon of 28/7/97

Neerala Parveen, aged 15, female, Kundaeel village, afternoon of 28/7/97

Sabeena Parveen, aged 15, female, Kundaeel village, afternoon of 28/7/97

Md. Abdul Awall, aged 18, male, Moheshrohali village, evening of 28/7/97

Md. Gonzer Ali, aged 27, male, Moheshrohali village, evening of 28/7/97

Md. Afzal Hossain, aged 25, male, Moheshrohali village, evening of 28/7/97

Md. Yar Mahmood, aged 20, male, Moheshrohali village, evening of 28/7/97

Sajeda Begum, aged 40, female, Lalamagira village, morning of 29/7/97

Juleka Khatun, aged 15, female, Lalamagira village, morning of 29/7/97

Fahima Begum, aged 35, female, Lalamagira village, morning of 29/7/97

Hafeeza Khatun, aged 14, female, Lalamagira village, morning of 29/7/97

Nijera Shikhi helpers and organisers: (in order of being interviewed)*From first trip to Kaloroa Thana*

Hasten Nihau Rina, aged 26, female helper Ramvaddrapur village, SSC graduate, afternoon of 7/7/97

Abdul Aziz, aged 38, male, organiser in Kaloroa area, HSC graduate, morning of 8/7/97

Shahadat Hossen, aged 36, male, organiser in Kaloroa area, HSC graduate, morning of 8/7/97

Md. Akbar Ali, aged 40, male, organiser in Kaloroa area, HSC graduate, morning of 8/7/97

Mamena Begum, aged 26, female helper Parikhupee village, SSC graduate, afternoon of 8/7/97

Kabrul Islam, aged 21, male helper Elishpur village, grade 11 graduate, evening of 8/7/97

Jharna Khatun, aged 17, female helper Elishpur village, SSC graduate doing HSC, evening of 8/7/97

Rehana Akhter, aged 17, female helper Elishpur village, doing SSC, evening of 8/7/97

From second trip to Tarash Thana

Hamida Begum, female helper Penguary village, grade 8 graduate, morning of 28/7/97

Mir Aysha Begum, female helper Kundail village, grade 8 graduate, afternoon of 28/7/97

Md. Azharul Islam, male helper Moheshrohali village, HSC graduate currently college student,
evening of 28/7/97

Monowara Begum, female helper Laluamagira village, grade 8 graduate, morning of 29/7/97

Annex 8 English Translation of test used and copy of original test in Bangla

English translation of test for functional literacy and numeracy

Writing test

1. Complete loan application form
2. *I will say three sentences to you, you should write these on the back of the loan form:*
 "My name is Karim"
 "Paddy is our main crop"
 "We study in our leisure time"
3. *Write a letter to a friend informing him or her that you will visit them next month and that you will be sending them Tk. 100.*

Reading and understanding test

1. *Read this letter carefully, you will be asked three questions about it when you have read it.*

Dear Salam,

I hope that you are well. I have some bad news for you that my son Kakon is sick. He has been suffering from fever since last week. I hope that he will soon be well.

Until now I have not received the shoes and clothes that you sent me. I hope that they will arrive soon. Thank you for this gift.

With all good wishes

Your friend

Rafique

- Questions:*
1. *What is Rafique's son called?*
 2. *What did Rafique send to Salam?*
 3. *For how long has Rafique's son being ill?*

2. *Read the instructions on the saline packet. You will then be asked three questions about these instructions?*

1. *When should the saline be used?*
2. *How much water is needed to prepare it?*
3. *How much saline water should be given to an adult patient?*

Numeracy test

1. Count out loud the numbers from 79 to 108.

2. The price of four different items is written besides a picture of each of them. You should read the price out aloud:

Umbrella 200 Taka

Fish 80 Taka

Cow 5,000 Taka

Cockerel 78 Taka

3. Ask the testee to write down from dictation four numbers from any of the three lines of A, B, C.

A. 7 13 43 69

B. 5 17 28 83

C. 6 15 32 76

4. What is the correct answer to the following questions:

A. You have 12 chickens and you have bought four more. Now tell me the total number of chickens you have?

B. You had 12 goats you have sold 4 of them, how many do you have left?

C. You have cultivated 30 monds of paddy in 1 bigha of land. How much can you grow in 3 bighas of land?

D. You have 20 eggs. You share the eggs between 5 people equally. Tell me how many eggs will each person have?

Annex 9 Three specimen answers from the written parts of the test

The first sheet is from the test completed by Juleka Parveen, testee number 9 from Lalamagira

The second sheet is from the test completed by Monya, testee number 1 from Kundael

The third sheet is from the test completed by Md. Yar Mahmood, testee number 1 from Moheshrohali

Annex 10 Map of Bangladesh showing places visited

Annex 11 Photographs of testing and interviewing of neo-literates

A female class at Lalamagira completing the written part of their test.

Note the tin box containing the mini-library to the left of the picture.

Hafeeza, aged 14, with ten of her geese at Lalamagira (see pages **Error! Bookmark not defined.** & **Error! Bookmark not defined.**).

A male group at Binshara completing the written part of the test.

The camera's flash disguises the dark room with learners reading and writing by the light of dim kerosene lanterns

A male group at Moheshrohali completing the written part of the test. The flash disguises the dark conditions.

The closed box of the mini-library can be seen in the extreme right of the picture.

Female students with their mini-library at Parikupi, one of the villages where the test was trialled.

Female Nijera Shikhi students completing the written part of their test.

Momena Katun, aged 16, a female Nijera Shikhi student completing the written part of the test at Ramavaddrapur, where the test was first trialled. Mr Ashok is the tester.

A female Nijera Shikhi student completing the reading and understanding and numeracy part of the test at Penguary village. Mr Badal is the tester.

