Necessitate of Nonformal Education in Post Disaster Environment

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ABSTRACT

The destruction of natural disasters can destroy schools, damage education facilities and displace and/or kill large numbers of teachers and students. Schools, themselves, their content, and materials are often damaged and sometimes permanently destroyed making schooling unavailable during periods following a disaster. Schools are also often used as shelters for people displaced from their homes. Children affected by natural disasters can miss an opportunity on weeks, months or even years of education. In Pakistan like many countries those are affected by earthquake, the formal school system does not have the capacity to enroll all children and youth as the buildings are affected and usually not fit for use. Many organizations like USAID, UNICEF, UNDP, Yardimeli (a Turkish based Organization) are functioning to restore formal system of education in earthquake affected areas (Mansehra in earthquake 2005) but their work normally starts after one year or so and usually covers primary and basic education. At present no programme exists in Pakistan to restore education on immediate and emergency bases. In order to ensure that the children do not lose a single day due to emergency and lack of preparation, education in a post-disaster situation should be steadfastly integrated in the disaster preparations (UNICEF Bangladesh 2010). This study reveals that children in disasters have a wide and special type of educational needs according to their context. Their education is disrupted and they have missed partially or completely their education. Many of them have witnessed terrible events so they require special type of psychosocial support. As formal system of education is not possible in post disaster conditions so there is need of some sort of alternative education to meet the wide range of educational needs of disaster affected children and the non-formal system only can provide educational opportunities for children and youth in affected areas.

Keywords: Disasters, Nonformal Education, Mansehra, Earthquake 2005

INTRODUCTION

Disasters are the indispensable part of human life. The history of the world reveals that emergence and outbreak of the disaster had been reported by all the past civilizations. The nature, frequency and severity of the disasters both in past and present times has had been incredibly linked with numerous factors ranging from the level of awareness, knowledge, skills, resources and responsibilities to socio, economic and political standing of a country or region of this planet. History also reveals that in almost all the disasters faced by the planet, it was the local community which developed first and immediate response. Correspondingly, the community based response mechanisms were considered as the most cost effective and sustainable among all responses ever made in the history. While considering the nature and magnitude of disasters and its associated impacts on different sections of the society, it is surprising to see that a continuum of neglect for certain cross-sections of population has been accompanied by all the response measures ever made in the face of disasters. In this regard

the most neglected and under privileged sections 1) children and 2) women have had been facing the major brunt of disasters and associated response measures. There is growing evidence all over the world that children are among the most neglected and vulnerable section of the population. The socio-cultural norms and values which often lack the understanding of child rights become more fluid and child blind when disaster strikes. More simply in critical circumstances, the children face the double burden, (1) due child blind policies and decision and, (2) because of being children.

Education is the single most important socioeconomic factor affecting people's vulnerability to natural disasters, both regionally and globally. Natural disasters are increasingly phenomena that we all clearly perceive and know that may have a direct impact on the welfare of regions where it hits and also on specific households' indicators in such areas. Depending of where we live, hurricanes, earthquakes, floods, droughts, etc, are threats to lives, properties, productive assets, and also can have an impact on social indicators. The growing incidence of natural disasters is highly correlated to the increasing vulnerability of households and communities in developing countries, as previous socioeconomic vulnerabilities may exacerbate the impact of a natural disaster, making more difficult the process of recovery (Vatsa and Krimgold, 2000). Thus, the impact of such events could result in an immediate increase in poverty and deprivation (Carter et al, 2007). Education is not only a right but in situations of emergencies, continual crises and early reconstruction it provides physical, psychosocial and cognitive protection which can be both lifesaving and life-supporting. Education sustains life by offering safe spaces for learning as well as the capacity to identify and provide support for affected individuals – particularly children and youth (INEE, 2004).

Over 75,000 people in nine districts of NWFP and AJK lost their lives, and an estimated 120, 00 more were injured. The affected area was massive, covering 30,000 square kilometers of mostly rugged, mountainous terrain- foothills of the Himalayas. Hundreds of communities were completely destroyed and entirely destroyed, and more than a third of its population killed (IRIN Pakistan, 2006c).

In the districts of Muzaffarabad, Bagh, Neelum, and Poonch (AJK), and Abbottabad, Battagram, Kohistan, Mansehra and Shangla (NWFP), there was severe damage- if not total destruction- affecting private housing, public infrastructure, social services, and communication systems. 2.8 million people were left without shelter- and at a time when the winter was just setting in. about 203,574 damaged, constituting approximately 84% of the total housing stock in AJK and 36% in NWFP (UNDP Pakistan, 2006:1). In most sectors and physical damage to building and infrastructure was comparatively higher in AJK than in NWFP. By February 2006, it ws calculated that 69,412 people had been severely disabled, and that 58,897 people suffered minor injuries (UNDP Pakistan, 2006:1).

Over 18,000 students died and many thousands more were injured or disabled, caught in the rubble of collapsing building (UNDP Pakistan, 2006). According to UNICEF Pakistan, the earthquake shattered the lives of 1.6 million children (2006a:2A). For the education sector, the timing of the quake was significant. At the time of the shock, many children were in schools starting their lessons. For many survivors, there were long- terms impacts of being in such a horrifying situation and of seeing classmates killed or injured. Teachers too were killed, injured or severely affected by seeing their school collapse, crushing students and colleagues.

According to the government of NWFP, in the five most affected districts, there was a pre-earthquake total of 6,250 education institutions (UNDP Pakistan, 2006), with a total of 541,933 students and 20.256 teachers. A high percentage of these were in primary schools

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(430,752 students and 13,208 teachers). In AJK, government data for the earthquake- affected areas stated that there were a total of 4,006 schools and 388,875 students enrolled. The total number of teachers in four of the affected AJ|K district was given by the government as 15,251 (education department data cited in UNDP Pakistan, 2006). Across the affected areas, a total of about 7,669 schools were affected- either totally or partially damaged. Of these, almost 5,600 were primary and middle schools. In the affected districts of NWFP, over a quarter of all schools were destroyed, and an additional 48% of all schools were damaged. In AJK the toll was even higher. In the three most affected districts, 96% of institutions were reported destroyed (UNDP pakistan, 2006).

Table 1. Schools/ colleges destroyed and damaged in NWFP

Districts	*Schools Destroyed*				*Schools Damaged*			
	Primary	*Middle*	*High H. Sec*	*Total*	*Primary*	*Middle*	*High H.Sec*	*Total*
Abbottabad	214	16	23	253	742	104	60	906
Battagram	314	17	17	348	239	24	8	271
Kohistan	183	17	3	203	345	43	8	396
Mansehra	647	47	43	737	888	108	77	1,073
Shangla	91	6	4	101	302	37	26	365
Total	1,449	103	90	1,642	2,516	316	179	3,011
Overall Devastation	26% Destroyed				48% Damaged			

Source: NWFP education department data cited in UNDP Pakistan 2006.

With 33 per cent of schools in the earthquake- affected areas of NWFP within its jurisdiction, Mansehra district was particularly hard hit in the quake. Forty- five % of all the schools destroyed in the province were located in this one district.

Table 2. Student and teacher deaths and injury in affected districts of NWFP

Districts	*Student Deaths/ Teachers Deaths*				*Students / Teachers Injured*			
	Primary	*Middle*	*High H. Sec*	*Total*	*Primary*	*Middle*	*High H.Sec*	*Total*
Abbottabad	17/1	0/1	2/0	19/2	40/0	20/0	0/2	60/9
Battagram	25/3	0/0	1/1	26/4	9/4	0/0	7/3	16/9
Kohistan	2/0	0/0	0/0	2/0	0/0	0/0	0/0	0/0
Mansehra	2,312/52	124/4	728/20	3,164/76	698/42	234/12	1,023/49	1953/103
Shangla	3/0	0/0	0/0	3/0	0/0	0/0	0/0	0/0
Total	2,359/56	124/5	731/21	3,214/82	747/48	254/14	1030/54	2029/116
Overall	0.59% Students died/ 0.4% teachers died				0.39 students died/ 0.57% teachers injured			

Source: NWFP Education Department data cited in UNDP Pakistan, 2006.

DISTRICT MANSEHRA

The earthquake of the October 8, 2005 caused severe damage and destruction to life, infrastructure and economy in district Mansehra. The earthquake highlighted limitations of the reactive and emerging response oriented approach to disaster risk managements in district Mansehra. The awareness of the policy makers, media, civil society, NGOs and other stakeholders remains low about disaster risk management. Capacities have improved, however, after the experience of the October 2005 earthquake but a more systematic approach towards disaster risk management is still lacking.

This Mansehra District Disaster Risk Management plan has been formulated to guide the work of entire district system in the area of disaster risk management under the umbrella District Disaster Management Authority. It has been developed through wide consultations with stakeholders from community, local, provincial and national government levels.

The damage to educational infrastructure in the district was very high as a total of 1,559 educational institutions both in rural as well as in urban areas were either destroyed or partially damaged. It also resulted in the loss of precious lives of a large number of students and the teachers who were present in those institutions at the time of earthquake. The damages to educational institutions in the district are given in the table below:

Table 3. Extent of damages to Education Sector in Mansehra

Primary through Higher Secondary Education Institutions	*Rural*			*Urban*				*Grand Total*
	Boys	*Girls*	*Total*	*Boys*	*Girls*	*Private*	*Total*	
Fully Damaged	459	262	721	12	10	192	214	935
Partially Damaged	306	175	481	08	07	128	143	624
Total	765	437	1202	20	17	320	357	1559

Source: (UNDP Pakistan, 2006, Preliminary Survey)

However, capacities of local Govt. and community, despite experience and efforts already achieved for disaster risks management especially after the earthquake, are still weak. The above scenarios and context forebode that disaster in further can be more frequent and their social economic and environmental impacts higher than in previous years and episodes. Areas not previously affected and prone to certain hazards (e.g. droughts, flooding) may also experience disaster in the future.

Mansehra is overall literacy rate of 37.81%. Female literacy rate is less than half i.e., 30.54% as against male literacy of 52.38 percent. Urban literacy rate against rural areas is 72.65% versus 35.94%. Student to teacher ratio is 34.

District MANSEHRA has a total number of 2523 Institutions. Out of these 2540 are located in urban areas and the remaining 31 are in rural areas. The total enrolment for the district is 255389. Urban areas have an enrolment of 8601, whereas the rural area share is 246788. The total number of teachers is 8497, of these 341 are teaching in urban area Institutions and 8156 are teaching in rural areas.

OBJECTIVES OF THE STUDY

1. To explore the existing educational provisions to cope disaster affectees.

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2. To assess the educational needs of disaster areas.
3. To judge non formal education as alternate education in post disaster environment.

METHODOLOGY OF THE STUDY

It is a descriptive type of study to explore the importance and need of non-formal education in post disaster conditions when formal education is unavailable. This study was delimited to earthquake areas, District Mansehra and Non Formal education. The population of the study was comprises of faculty of education of Allama Iqbal Open University Islamabad, teachers and parents of affected areas at elementary level. District Mansehra was selected for this study which was badly affected by earthquake 2005. The sample of the study consisted of 18 members of faculty of education, 100 teachers and 250 parents of students at elementary level of district Mansehra. A questionnaire on 5-likert scale was developed to collect data. This questionnaire was covering the existing provision of education, educational needs of disaster area and importance of non-formal education as alternate for formal education.

For the analysis of data percentage, mean, standard deviation and z-test of one tail were used.

The internal reliability of the questionnaires for this study was determined by using Cronbech Alpha and it was 0.848

ANALYSIS OF DATA

The scoring for questionnaire on 5-point Likert scale was as follow:

Responses	*Abbreviation*	*Score*
Strongly Agreed	SA	5
Agreed	A	4
Uncertain	UNC	3
Disagreed	DA	2
Strongly Disagreed	SDA	1

FINDINGS

Collected data was analysed and findings were:

1. Most of (77.15%) the respondents agreed that reaching/travelling to school becomes impossible and unsafe after disaster. Mean value is 3.85 and Z-value is 0.476.
2. Majority of (88.13%) the respondents agreed that some teachers die or are disabled in disaster. Mean Score is 4.49 and z-value is 0.472
3. Majority of (88.14%) the respondents agreed that physical facilities of schools diminish in disaster. Mean Score is 4.48 and z-value is 0.502
4. Majority of (83.39%) the respondents agreed that educational arrangements become non-existence after disaster. Mean Score is 4.21 and z-value is 0.519
5. Most of (73.59%) the respondents agreed that formal schooling cannot meet the needs of disaster areas after disaster. Mean Score is 4.23 and z-value is 0.464

6. Majority of (89.91%) the respondents agreed that learning materials are not available for study after disaster. Mean Score is 4.19 and z-value is 0.501
7. Majority of (80.42%) the respondents agreed that substitute teachers (instead of regular one) are not available after disaster. Mean Score is 4.15 and z-value is 0.465
8. Majority of (80.42%) the respondents agreed that Special academic schedule is not issued after disaster. Mean Score is 4.45 and z-value is 0.500
9. Majority of (89.91%) the respondents agreed that parents are frightened to send their child to school after disaster. Mean Score is 4.51 and z-value is 0.497
10. Most of (74.78%) the respondents agreed that education facilities need to meet basic requirements after disaster. Mean Score is 4.15 and z-value is 0.532.
11. Most of (72.99%) the respondents possessed an attitude of agreement that books and other learning materials may be provided after disaster. Mean Score is 3.75 and z-value is 0.514.

Sr. No	*Statements*	*Responses*					*Mean*	*SD*	*z-Statistic*
		SA %	*A %*	*UNC %*	*DA %*	*SDA %*			
1	Reaching/travelling to school becomes impossible and unsafe after disaster.	44	33	4	2	17	3.85	1.43	0.476
2	Some teachers die or are disabled in disaster.	64	25	10	2	0	4.49	0.67	0.472
3	Physical facilities of schools diminish in disaster.	56	32	6	6	0	4.48	0.84	0.502
4	Educational arrangements become non-existence after disaster.	43	40	11	6	0	4.21	0.85	0.519
5	Formal schooling cannot meet the needs of disaster areas after disaster.	51	13	17	7	2	4.23	1.11	0.464
6	Learning materials are not available for study after disaster.	33	57	6	4	0	4.19	0.72	0.501
7	Substitute teachers (instead of regular one) are not available after disaster.	42	39	13	7	0	4.15	0.89	0.465
8	Special academic schedule is not issued after disaster.	60	27	11	2	0	4.45	0.77	0.500
9	Parents are frightened to send their child to school after disaster.	71	19	0	10	0	4.51	0.93	0.497
10	Education facilities need to meet basic requirements after disaster.	51	24	14	11	0	4.15	1.04	0.532
11	Books and other learning materials may be provided after disaster.	31	42	4	17	7	3.75	1.24	0.513
12	Alternate education system may be developed for disaster areas.	51	33	11	5	0	4.29	0.87	0.468
13	Alternating (camp schools) may be established after disaster.	60	27	8	6	0	4.40	0.85	0.495
14	School timing may be made flexible after disaster.	44	17	22	15	3	3.57	1.37	0.517

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12. Majority of (83.68%) the respondents agreed that alternate education system may be developed for disaster areas. Mean Score is 4.29 and z-value is 0.468.
13. Majority of (86.35%) the respondents agreed that alternating (camp schools) may be established after disaster. Mean Score is 4.40 and z-value is 0.495.
14. Many (61.43%) respondents agreed that school timing may be made flexible after disaster. Mean Score is 3.57 and z-value is 0.517.

CONCLUSIONS

Disaster is sudden misfortune in which homes are destroyed and environment of living changes adversely. Reaching/travelling to school becomes impossible and unsafe after disaster. Many relatives and teachers die or are disabled during disaster. Physical facilities of schools diminish and educational arrangements become non-existence so full attention to education becomes impossible. Natural disasters create disruptions into education system. The education of children is interrupted during disaster especially of girls and formal schooling cannot meet the needs of disaster areas. Books and other learning materials are not available to study for children and special academic schedule is not issued to fulfill the needs of disaster affected areas. No arrangement for education is available; formal teachers are unavailable to teach and substitute teachers (instead of regular one) are not available after disaster. Education facilities need to meet basic requirements of disaster affected areas and basic standards of education therefore education of child should be started from very next day after disaster. Disaster damaged majority of schools and higher educational establishments so alternate education system may be developed to meet the educational needs of disaster areas. That alternating education system should be child friendly, flexible study hours and easily accessible. The unique and flexible attributes of non-formal education can ensure both physical access and access to one of the most important human rights-education for people in a crisis so there is a need of non-formal education system in post disaster conditions. Books and other learning materials are to be provided free of cost after disaster. Replacement of required teachers is to provide and financial support to parents is to arrange so that parents send their children to education.

RECOMMENDATION

Education should be given priority so that student should not lose a single day of education after disaster and education of child should be started from very next day after disaster. Physical facilities of schools diminish and formal schooling cannot meet the needs of disaster areas so alternate (Non-Formal) education system may be started in post disaster conditions which should be open, flexible, activity based, Joyful for young children, easily accessible and free of cost. Non Formal Education is necessary in post disaster circumstances which may be used to reduce the problems of education after disaster. Modern technologies should be used for education in post disaster conditions and Radio Technology is the best way of communication in post disaster situations.

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