

CHAPTER III

Risk / Hazard Analysis

History of Disaster

Type of Hazard	Year of Occurrence	No of villages affected	Population affected	Impact on Life	Damage to houses (Part.& Fully)	Damage to infrastructure (Part.& Fully)	Damage to crops	Live stock
Cyclone	1999-2000	53	433	Nil	23	1	Nil	Nil
	2000-2001	20	94	Nil	94	4	Nil	Nil
	2001-2002	52	319	1	272	2	Nil	Nil
	2002-2003	Nil	Nil	Nil	Nil	Nil	10 ha	Nil
	2003-2004	Villages in Umsning, Umling and Jirang affected	Nil	Nil	Nil	Nil	Damage to crops	Nil
	2005-2006	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	2006-2007	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	2007-2008	859	28	Nil	Nil	Nil	Damage to crops	Nil
	2008-2009	756	49	Nil	Nil	Nil	Damage to crops	Nil
Hailstorm	1999-2000	53	433	Nil	Nil	Nil	N.A	Nil
	2000-2001	1	38	Nil	Nil	Nil	Nil	Nil
	2001-2002	8	154	Nil	156	2	N.A	Nil
	2002-2003	22	162	Nil	162	1	N.A	Nil
	2003-2004	Villages in Umsning & Umling C&RD Block affected	Nil	Nil	Nil	Nil	Damage to crops	Nil
	2005-2006	Jirang Block	12	469	Nil	Nil	Nil	Nil
2006-2007	Jirang Block	6	128	Nil	Nil	Nil	Nil	

	2007-2008	Villages in Umsning & Umling C&RD Block affected	60	1977	Nil	Nil	Yes	Nil
	2008-2009	Villages in Umsning & Umling C&RD Block affected	37	1590	Nil	Nil	Yes	Nil
Fire Accidents	1999-2000	53	433	Nil	45	Nil	Nil	Nil
	2000-2001	23	26	Nil	23	Nil	Nil	Nil
	2001-2002	22	25	Nil	25	Nil	Nil	Nil
	2002-2003	16	29	Nil	29	Nil	Nil	Nil
	2003-2004	22	38	Nil	38	Nil	Nil	Nil
	2004-2005	41	18	NIL	41	Nil	Nil	Nil
	2005-2006	182	68	Nil	182	Nil	Nil	Nil
	2007-2008	113	60	Nil	113	Nil	Nil	Nil
	2008-2009	63	53	Nil	63	Nil	Nil	Nil
Landslides	1999-2000	1	1	Nil	Nil	Nil	Nil	Nil
	2000-2001	4	5	Nil	5	Nil	Nil	Nil
	2001-2002	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	2002-2003	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	2003-2004	2	8	Nil	8	Landslides on National Highway	Nil	Nil
	2004-2005	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	2005-2006	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	2007-2008	24	26	NA	NA	NA	NA	NA
	2008-2009	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Floods	1999-2000	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	2000-2001	9	62	Nil	62	Nil	Nil	Nil
	2001-2002	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	2002-2003	Nil	Nil	Nil	Nil	Nil	Nil	Nil

	2003-2004				Umsnin g,Umlin g ,Jirang Block a affected		Umsnin g,Umlin g ,Jirang Blocks a affected	
	2004-2005	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	2005-2006	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	2007-2008	148	6	Nil	Nil	Nil	Damage to crops	Nil
	2008-2009	855	32	Nil	Nil	Nil	Damage to crops	Nil
Lightening	1999-2000	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	2000-2001	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	2001-2002	2	3	3	Nil	Nil	Nil	Nil
	2002-2003	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	2003-2004	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	2004-2005	2	3	3	Nil	Nil	Nil	Nil
	2005-2006	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	2007-2008	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	2008-2009	Nil	Nil	Nil	Nil	Nil	Nil	Nil

Seasonality of Hazard

Type of Hazards	Jan-Mar				April-June				July-Sep				Oct-Dec			
	H	C	A	I	H	C	A	I	H	C	A	I	H	C	A	I
Cyclone					*	*	*	*	*				*	*	*	*
Flood						*			*	*	*	*				
Landslide					*	*	*		*	*	*		*	*	*	
Earthquake	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hailstorm		*			*	*	*	*					*	*	*	*
Fire accidents					*	*	*	*								
Chemical Accidents	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Epidemic									*		*		*		*	
Road Accidents	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

H: Human, C: Crop, A: Animals, I: Infrastructure

Risk Assesment

Type of Hazards	Time of Occurrence	Potential Impact	Vulnerable areas
Flood	Pre/Post monsoon	Impact on the population in terms of injuries or deaths or	All Blocks/ Villages

		indirect impacts through disruption of services and damage to crops and infrastructure. Additionally there may be damage and contamination to water supply . Disruption of excreta and solid waste systems is also possible . Other potential impacts could include an increase in vectors and chemical contamination of flooded areas.	
Cyclone	Pre/Post monsoon		All Blocks / Villages
Fire	Anytime of the year		All Blocks / Villages
Epidemics	Anytime of the year		All Blocks / Villages
Road Accidents	Anytime of the year	Road Accidents in Ri Bhoi district take place on an everyday basis considering that National Highway 40 is the main link with areas outside the district.	Blocks / Villages
Industrial Accidents	Anytime of the year		Blocks / Villages
landslides	Pre/Post monsoon	Have major impacts on humans: death, damage to environment, destruction to structures, forceful changes in lifestyles.	Blocks / Villages
Hailstorm		Damage to crops and infrastructure	Blocks / Villages
Earthquake	All year round	Utility services could be interrupted, transportation routes cut off in places.Power lines could break and cause injuries. Economic impact could be severe due to closed businesses. Psychological effects will be significant especially if after shocks occur.Personal injuries caused by falling debris.	Blocks / Villages

Any Other			
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Vulnerability Analysis

Infrastructures				
	landslide	Flood	Earthquake	Cyclone
		Area Name	Area Name	Area Name
Road network	National highway 40		The entire district falls under zone V of earthquake prone areas in the country.	
Water ways		Places near Umtrew ,Umiam river		
Water supply				
Sewage				
Hospital				
Food stocks & supplies				
Communication				
Embankments		Embankments near Umtrew ,Umiam river		
Bridges				

