

CESS MONOGRAPH 12

Suicide in SAARC Countries

Multidisciplinary Perspectives and Evidence



S.Galab, U.Vindhya and E.Revathi



**CENTRE FOR ECONOMIC AND SOCIAL STUDIES
HYDERABAD**

March, 2010

About the authors

Shaik Galab, a Development Economist, is a Professor at Centre for Economic and Social Studies. He was trained at Waltair School of Economics (M.A, 1978 and Ph.D 1985) and Department of Statistics (M.Sc., 1980) of Andhra University. His initial research interest at the University was Efficiency in Resource Utilisation in Agriculture. At Centre for Economic and Social Studies, he has carried out research on Effectiveness of Public Policies related to Poverty Alleviation; Rehabilitation and Resettlement of Project Affected; Natural Resource Management; Handloom Sector; Solid Waste Management in Urban Areas; and agrarian distress. He has also conducted research on the welfare impact of Public Sector Reforms apart from Teaching and Guiding M.Phil and Ph.D students. His recent work focuses on Social Capital, Women Empowerment, Child Labour and Livelihoods. He was a member of Farmers Welfare Commission- a commission appointed by the Government of Andhra Pradesh in response to the Agrarian Crisis in the State leading to a large incidence of suicides among the farmers; permanent invitee on the expert group on agricultural indebtedness constituted by Government of India, and co-opted member on the sub group to study on poverty constituted by the Planning Commission, Government of India. He is one of the co-authors of the book 'On Joint Forest Management in Andhra Pradesh'. Presently he is leading the Young Lives Project India on childhood poverty, as Principal Investigator.

U. Vindhya is Professor of Psychology, currently on lien at the Centre for Economic and Social Studies, Hyderabad, India. Earlier she had taught at Andhra University where she was also the Director of the Centre for Women's Studies. Her research interests are located in the interface of psychology and feminism and she has published book chapters and journal articles on women's mental health, domestic violence, and the psychological dynamics of women's political activism. Earlier, she had edited a book titled Psychology in India: Intersecting Crossroads and is presently co-editing a volume titled International Perspectives on Feminism as part of an international collaborative effort, to be published by Springer shortly. She is a past President of the National Academy of Psychology (India) and had also served as its Secretary-General. She is a recipient of the Fulbright Visiting Lecturer Fellowship, USA (2004), the South Asian Visiting Scholarship at Oxford University (1998), and the Visiting Lecturer Fellowship at Eotvos Lorand University, Hungary (2001). She is presently engaged in partnership with the International Center for Research on Women, in a research project on Trafficking among women and girls in Andhra Pradesh.

E. Revathi is currently Professor in the Department of Economics, Kakatiya University, Warangal. She was on lien at the Centre for Economic and Social Studies (CESS), Hyderabad, during 2004-09. She completed her MA, M.Phil and Ph.D. from Kakatiya University. She received doctoral fellowship under Women's Studies programme from ICSSR. She worked on 'Women work and Technology in Agriculture' for her Ph.D. which has been published as a book. She visited few European countries and had interactions with scholars at various institutions in 2000. At CESS she carried research on the issues of Agrarian crisis in Andhra Pradesh, farmers and weavers suicides. She was involved in research projects on Rural Indebtedness and National Rural Employment Guarantee Programme in association with other scholars at CESS. She also worked in the area of Regional Inequalities. She contributed to the Sub-group on Gender and Agriculture for the Eleventh Five Year Plan. She is presently working on 'State Policies, Women's Access to Land and Women Empowerment', a collaborative project with National Institute of Agricultural Extension Management sponsored by the Ministry of Agriculture, New Delhi. She teaches Macro Economic theory and policy, and Agricultural Economics.

CESS MONOGRAPH 12

Suicide in SAARC Countries

Multidisciplinary Perspectives and Evidence

S.Galab, U.Vindhya and E.Revathi



CENTRE FOR ECONOMIC AND SOCIAL STUDIES
HYDERABAD
March, 2010

CENTRE FOR ECONOMIC AND SOCIAL STUDIES MONOGRAPH SERIES

Number - 12
ISBN 81-88793-13-2

March, 2010

Series Editor : S. Galab

© 2010, Copyright Reserved
Centre for Economic and Social Studies
Hyderabad

Rs. 200/-

Published by :
Centre for Economic and Social Studies
Begumpet, Hyderabad-500 016
Ph : 040-23402789, 23416780, Fax : 040-23406808
Email : postmaster@cess.ac.in, www.cess.ac.in

Printed by :
Vidya Graphics
1-8-724/33, Padma Colony,
Nallakunta, Hyderabad - 44

Foreword

This monograph is a product of our concern to engage with socially meaningful and relevant research that not only portrays social realities but also yields to policy prescriptions. The ever increasing rise in suicides in recent years - by men and women, of different age groups, from various occupations, and across different locations - provided a context for addressing this issue and for unraveling its complexities. The present monograph is a synthesis of the papers presented at an international seminar on the phenomenon of suicide held last year at CESS. The SAARC region was taken as the canvas for examining the problem during the seminar, given the widespread scale of prevalence of suicide in the countries in this region.

The suggestion for holding a seminar and for bringing together scholars and professionals engaged with the issue of suicide from different perspectives came initially from Sri A.K. Goel, the then Special Chief Secretary, Planning Department, and presently the Special Chief Secretary, Department of Energy, Government of Andhra Pradesh. We are thankful to him for initiating the process and for taking a keen interest in exploring policy linkages that would have an impact on solutions.

I hope the monograph will make an effective contribution to the discourse on the dynamics and interventions for suicide, one of the most vexatious problems confronting human beings.

Manoj Panda
Director, CESS

Preface

This monograph is put together from the recorded proceedings of the oral and power point presentations made during the International Seminar on *Multidisciplinary Perspectives on Suicide: Experience of SAARC countries* organized by the Centre for Economic and Social Studies, Hyderabad on January 9th and 10th, 2009. We have however chosen to present this report, not in a purely verbatim form in chronological order of the presentations. Instead, we attempted to weave the text of the presentations and the ensuing discussions into hopefully, a coherent, integrated whole.

The main impetus for holding this seminar came from the primary concern about the spiralling rates of suicide in India and other countries in the SAARC region and also from the interest to view and understand the phenomenon adopting a multidisciplinary lens. As the suicide literature is spread across a variety of disciplines, making it rather difficult for researchers and practitioners to stay informed about the knowledge base in the field, the purpose of the seminar was to facilitate the convergence of researchers and practitioners from a broad spectrum of fields such as psychiatry, epidemiology, public health, and social sciences including economics, political science, sociology, philosophy and psychology in addition to NGO representatives involved in front-line suicide prevention work. Pointedly, the central objective of the seminar was to inform each other about what each discipline has to offer on the understanding of suicide and to envisage possible directions for future research and policy.

The seminar was also meant to serve as a platform for individuals from different SAARC countries engaged in suicide research and prevention in order to understand the commonalities and variations in the experience of each of these countries in dealing with the issue of suicide. Despite the organizers' attempts to obtain representation from each of the SAARC countries, a substantial number of people from other countries who had confirmed participation could not eventually make it to the seminar primarily because of difficulties in securing visa (from Pakistan in particular) and also due to the travel advisories put out restricting travel to India in the aftermath of the Mumbai terror attacks in November 2008. These circumstances that were completely beyond our control, resulted in a somewhat truncated participation, but was made up in part by the intensive and sustained dialogue and discussion over the two days, crossing the borders of not only countries but of disciplines as well.

The main achievement of the seminar as we see it was this coming together of divergent disciplinary perspectives in order to understand the many different overlapping yet somewhat distinct problems of suicide.

Though the format of the seminar was structured in terms of six thematic sessions, we decided, for the sake of the present report, to adopt a different structure. As indicated earlier, we are not presenting each of the papers as they were presented in the seminar. Instead, we put the report together on the basis of the following central themes that emerged during the course of the seminar.

1. Patterns and trends of suicide
2. Socio-economic contexts of suicide
3. Disciplinary perspectives
4. Interventions including civil society initiatives and state policy measures

The list of titles of presentations and names of authors of the papers is given at the end of the report.

CONTENTS

	Page no.
<i>Foreword</i>	iii
<i>Preface</i>	v
<i>List of figures and tables</i>	ix
<i>Acknowledgments</i>	xi
<i>Executive Summary</i>	xiii
 SECTIONS	
I. Trends and Patterns of Suicide	1-15
II. Socio-economic Contexts of Suicide	16-29
III. Disciplinary Perspectives on Suicide	30-41
IV. Interventions: State and Civil Society Initiatives	42-52
<i>References</i>	53
<i>Appendices (List of authors and papers)</i>	54-55
<i>Concept note</i>	56

List of Figures

Title of the Figure	Page No.
1 Global Suicide Rates (2008).....	3
2 Global Suicide Rates 1950-1995 (per 100,000 population).....	3
3 Suicide Rates in India (2007).....	5
4 Suicide Rates in States/Union Territories in India (2007)	6
5 Suicides in Sri Lanka 1993-2007	8
6 Age Distribution of Suicide Victims in India	8
7 Age Distribution of Suicide Victims in Sri Lanka	9
8 Suicide Rates in Men and Women 1967-2007	11
9 Suicide Victims by Sex and Age group in India 2007	12
10 Male and Female Suicide Rates in Five Countries	13
11 Share of Various Causes of Suicide in India	15
12 Reasons for Committing Suicide (Age and Sex wise)	17
13 Methods Used for Suicide in Bangladesh, India and Sri Lanka	20
14 Proportion of Farmers and Others' Suicides in India	22
15 Farmers' Suicides across States in India	23
16 Suicide Mortality Rate among Farmers and Non-farmers in India	24
17 Multi-factorial Model of Suicide	40
18 Death Rate among Women of Reproductive Age in Bangladesh (per 100,000 women)	44
19 Pesticide Storage Boxes with Double Locks in Sri Lanka	46

List of Tables

Title of the Table	
1	Gender Specific Suicide Rates 9
2	Male-Female Ratio in High and Low Suicide Rate States in India 11
3	Suicides in Sri Lanka (2003-2007) 12
4	Suicidal Deaths among Weavers in Andhra Pradesh (1997-2008) 26
5	Suicide in Non Pesticide Management Villages in Khammam District, Andhra Pradesh, India 42
6	Interventions of Maithri, Kochi to Reach out to the Distressed and the Suicidal 46

List of Boxes

1	Beyond numbers..... 4
2	Risk factors for suicide attempts 6
3	Risk-factor based strategies for suicide prevention 50

Acknowledgements

An endeavour such as organizing an international seminar and subsequently putting together the presentations for this monograph is a task that would not obviously have been possible without the support, collaboration, and a sense of 'fraternity' of a large number of people. To all of them we owe our deep gratitude and heartfelt thanks.

We would like to express our appreciation for the support and encouraging suggestions given by Prof. Mahendra Dev, Chairman Commission for Agricultural Costs and Prices (CACP), New Delhi, and former Director, CESS, Prof. Manoj Panda, Director, CESS, Sri A.K.Goel, the then Special Chief Secretary, Planning Department, and presently the Special Chief Secretary, Agricultural Production, Government of Andhra Pradesh, and members of the Advisory Committee for the seminar -- Professors K.L.Krishna, Chairman, CESS, R.Radhakrishna, Rama Melkote, D.Narasimha Reddy, G.N.Rao, Sudhakar Rao and V. Ratna Reddy.

We are grateful to the following individuals for their help and support in conducting the seminar -- Dr. P. Padmanabha Rao for overall coordination of logistics, Dr. Prudhivakar Reddy and Narender Reddy for catering arrangements, Dr. Suri Babu for organizing the pre-seminar press meet, Dr. G. Aivelu and Lakshmi, Panchakshri, Rama Devi and Prabhavati for reception of the delegates, and Prasada Rao, Bhaskar Reddy, Malla Reddy, Narasaih and Mahender Reddy for the transport arrangements.

We owe special thanks to the research assistance given by Lydia Sarella and M. Sridhar, and for all the 'running around' they did for the umpteen things necessary for the smooth conduct of a seminar.

A special word of thanks to the rapporteurs - Rachana Dhingra, Lydia Sarella, P. Dharmaraju, Sowmya Vinayan and M.Sridhar for taking care to report all the proceedings and for prompt submission of their reports and to Swati Dev for the laborious task of transcribing the recorded proceedings.

This monograph has benefited from the critical comments given by the two reviewers, Professors P. Radhakrishnan and D.Narasimha Reddy who painstakingly went through the draft and to whom we are immensely thankful. The shortcomings and inadequacies that remain are of course, entirely ours.

S.Galab, U.Vindhya and E.Revathi

Executive Summary

The seminar presentations and discussions can be encapsulated in the following specific themes.

Trends and patterns of suicide

Socio-economic contexts of suicide

Disciplinary perspectives on suicide

Interventions: State and civil society initiatives

Trends and Patterns of Suicide: Though suicide has been in existence throughout human history, the current research and policy interest in suicides is generated by the increasing suicide rates worldwide, and is located in the context of processes of social and economic change taking place in the developing countries in general and in the SAARC countries in particular. The patterns and trends of suicide rates in these countries point to the following. More than half of the suicides that occur globally every year are from south-east Asia and the suicide rate in many of the SAARC countries is rising over time, with high incidence among the 15-29 age group. Case fatality is also nearly 15 times higher than in developed countries. Despite the preponderance of men who complete suicide as in the world over, the male-female ratio is smaller by international comparison. A comparison of overall trends in the past two decades however suggests that with the transition to more developed economies; the male rate is found to be galloping with the gender gap getting wider. But the pattern also points to the rising incidence of suicide and suicide attempts among married, younger women in particular indicating that gender disadvantage including domestic violence are significant predictors of suicide and suicidal behaviour. More importantly, unlike in the developed countries, the overlap between suicide and attempted suicide is more pronounced in the region with the extreme toxicity and lethality of organophosphorus compounds ingested (a commonly adopted means for committing suicide) combined with inadequate medical services which mean that 'cries for help' not otherwise intended to be suicides often end up as deaths.

Socio-economic Contexts of Suicide: A striking feature of the occurrence of suicide in developing countries is that the relationship between mental illness and suicide is not as pronounced as in the developed countries in the west, where nearly 90 percent of suicides are said to be associated with some form of mental illness. In this region, the phenomenon of suicide is impacted by broader social, economic, and cultural factors ranging from agricultural crisis, indebtedness, and sudden economic upheavals to the dissolution of

cohesive social bonds, and changing social relations in the context of globalization and the technology that it has unleashed. In addition, psychosocial stressors such as interpersonal relationship problems, family conflicts, examination pressure/failure, alcoholism and chronic physical illness are identified as some of the predominant factors pushing individuals in this region to end their lives.

Disciplinary Perspectives on Suicide: As a function of its multidisciplinary nature, the relevant suicide literature is spread across a wide variety of professional disciplines including medicine, psychiatry, nursing, and psychology, as well as in the social sciences. The fundamental disagreement between the social science literature on the one hand and that of the mental health disciplines on the other relates to the differences between those who view suicide as a consequence of policies and institutions of the social structure as in the case of the former versus those who view it as an individual attribute as in the case of the latter. While this disagreement may have to do with the disciplinary bias in terms of level and unit of analysis, a broad consensus that emerged in the course of the seminar discussions was the felt need to engage with both the levels. The question about the theoretically appropriate level for analyzing a phenomenon such as suicide ought not to be couched in terms of a dichotomy (either the individual level or the structural level) - rather it is both, pointing to the necessity of adopting a multi-level analytical framework.

Interventions: State and Civil Society Initiatives: While suicide may be indirectly linked to the broader socio-economic and cultural contexts, interventions to reduce the rates are addressed at both the state policy level and at the level of amelioration of individual distress. Therefore on the one hand, we find policy initiatives like curbs on pesticide access and promotion of public education on safe keeping of pesticide (in view of pesticide poisoning being the single largest category of means of committing suicide in several SAARC countries), and on the other hand, we have civil society interventions like help lines and counselling centres by NGOs, who often serve as emotional service providers. While these are examples of specific initiatives with possibly, limited application, suicide prevention strategies at the larger level need to take into account socio economic issues particularly in the context of neo liberal reforms that are playing a significant role in destabilizing individual lives and becoming risk factors for suicides. Such measures are linked to production, trade and social security issues in the small-scale and employment oriented production sectors in particular. It is precisely because of the multi dimensionality of the problem of suicide that it needs multiple intervention strategies which amount to not a 'one pill-cure-all' strategy but a variety of interventions which will not only be locally relevant but also culturally appropriate and cost effective.

I

Trends and Patterns of Suicide¹

At first glance, the phenomenon of suicide appears to be simple and direct — some distressed individuals decide to end their lives. The occurrence of suicide appears to be an ostensibly individual psychological act, stemming from the pain and agony of hopelessness, helplessness and depression, leading up ultimately to the decision to end it all. However, from the vast suicide literature, spread across a variety of disciplines from biochemistry to cultural studies, it seems, an understatement of sorts to say that suicide is a complex behavioural problem. As the literature indicates, the phenomenon of suicide seems to be impacted and determined by a host of multiple factors. The persistence of suicides throughout recorded human history is indeed a tough challenge to those who want to understand, predict or intervene in them.

The central objective of this seminar was therefore to attempt to unravel the complexities involved, particularly in the context of the societies in the SAARC region that are in transition, and are buffeted by economic upheavals. As organizers of the seminar, our shared standpoint is that suicide is not simply an indicator of individual distress, but rather needs to be understood as a measure of social pathology as well. In particular, we wished to anchor analysis of the phenomenon of suicide in the current context of the SAARC countries (or at least in most of the SAARC countries, since countries like Maldives, Bhutan and to some extent, Nepal do not figure prominently in suicide data) and the ongoing exacerbated social and economic changes/crisis taking place in these societies. Primarily, we took a cue from the Durkheimian conceptualization of an allegedly private act such as suicide being subject to variations in social structure that throw normative boundaries into disarray and weaken individual regulation. It was more than a century ago that the French sociologist, Durkheim, had linked suicide rates to modern urban life that disrupts social cohesion or social regulation. Despite the fact that Durkheim's analysis of suicide is still the most widely used, analysed, and disputed sociological theory concerning suicide, the current understanding has veered towards multiple factors impacting ultimately the individual's decision to commit suicide.

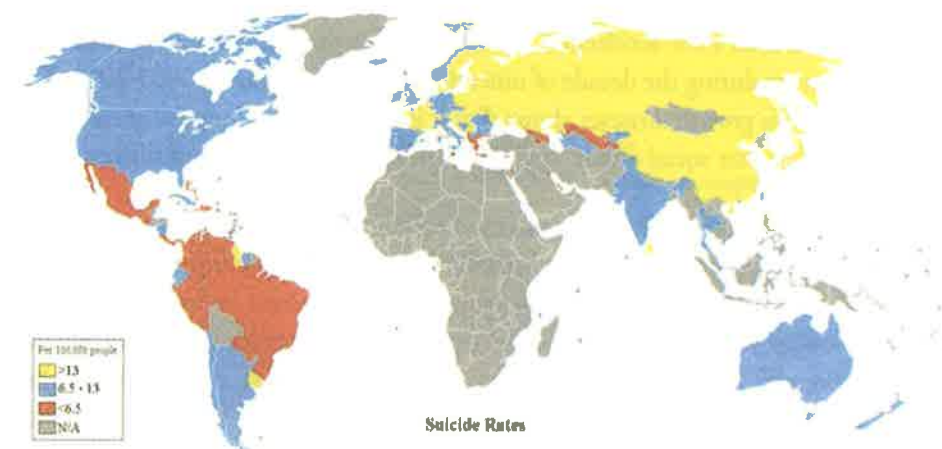
¹ This section is based on the papers presented by S. Galab, U. Vindhya and E. Revathi, Lakshmi Vijayakumar, Daya Somasundaram, Vikram Patel, Srijit Mishra, P. Radhakrishnan, Kapil Ahmed and the discussions following the presentations.

We wanted the overarching framework of the seminar to encompass both the concerns of the societal and the individual. We are of the view that variations in social structure, reflected in suicide rates, social and economic trends, demographic groups and countries are linked with state policies. At the same time however, through adopting such a macro societal focus, we do not intend to under serve the intensely subjective processes of psychological suffering, and to the special needs related to assessment, and prevention of individual would-be suicides, even if they are in small numbers. In other words, broad socio-demographic or epidemiological problems of suicide could be quite different from the case treatment problems of individual suicides. We wanted the seminar discussions to reflect on both these concerns.

The interdisciplinary field of suicidology or the science of self-destructive behaviour, as a scientific discipline in its own right has progressed during the last two decades, with the development of large national databases, and an imperative across nations to understand and prevent suicide (*Figures 1 and 2 give a picture of the global suicide rates*). The scene in the SAARC countries however, is different. While systematic updates and reviews of studies on the epidemiology of suicide, on specific populations such as youth or the elderly, and on effectiveness of prevention strategies exist in several developed countries, reviews of research in the SAARC countries are limited. Further, the prevention of suicide has been a major focus of national public health policy in countries like the US since the 1960s. The situation in the SAARC countries however is such that despite calls for broad-based and interdisciplinary prevention, some countries (like Pakistan for instance) do not even have official data on prevalence of suicide. While patterns and correlates of prevalence, and risk and protective factors for suicide and suicidal behaviour have been extensively studied in the US and Europe, suicide in some of the SAARC countries is not even included in the national mortality statistics (for instance, in Pakistan and Bangladesh).

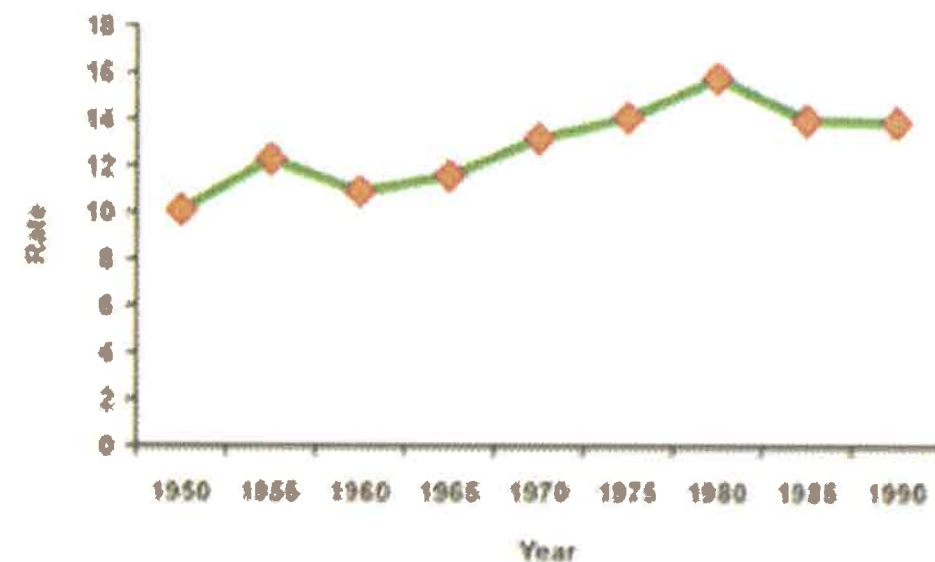
Another rationale for spotlighting the SAARC region is the upward trend of suicide mortality rate in this region over time. While a 60% rise in death by suicide over the past 45 years in the world is documented (World Health Organization, 2008), more than half of the suicides that occur globally every year come from south-east Asia. Case fatality is also nearly 15 times higher than in developed countries. Even in countries like Pakistan, studies challenge the widely held belief that suicide is rare in an Islamic country because of the religious sanctions against suicide.

Figure 1: Global Suicide Rates (2008)



Source: Daya Somasundaram, paper presented at the seminar

Figure 2: Global Suicide Rates 1950-1995 (per 100,000 population)



Source: Daya Somasundaram, paper presented at the seminar

Despite similar economic policies and structural transformation across the countries in the SAARC region however, there is considerable variation in incidence of suicide just as there is variation in incidence and patterns of suicide across states in India. It is possible

that the patterns of suicide across states in India could provide some leads to understand the patterns across the SAARC countries as well. The new economic reforms in most of the SAARC countries have accelerated the average growth rate of economy from 4.8 percent per annum during the decade of nineties to 8.2 percent during 2003-2008. The composition of this growth however shows that it is marked by an increase in economic inequalities and greater social divide, leading to greater vulnerability and distress.

Within India, the picture of intra-state variation reveals that it is in the high and medium growth states like Maharashtra, Andhra Pradesh, Karnataka, Kerala, and Punjab that the incidence of suicide among occupational groups such as farmers in particular is high whereas the low growth BIMARU² states are marked relatively by a conspicuous absence of suicides. Broadly, the southern states, compared to the northern states have a higher suicide rate in general. The metros of Bangalore, Hyderabad, and Chennai – all located in the south – are also reported to have the highest rates of suicide in the country. This higher incidence cannot be attributed only to better reporting systems in the southern states. Differing levels of aggression, determined and shaped by the history, geography, and culture of the northern and southern regions of India, have also been offered as an explanation, with people in the north inclined to direct aggression outward, and people in the south prone to turning it inward and thereon to suicide (*Figures 3 and 4 provide suicide rates in northern and southern India*).

Box 1

Beyond numbers...

- ▶ Reported suicide rates are high; community autopsy studies show that actual suicide rates may be five to ten times higher
- ▶ Marked regional variations in suicide rates may reflect accuracy of reporting or variation in risk/protective factors
- ▶ Understanding causes of suicide may point to prevention and control strategies

Source: Vikram Patel, paper presented at the seminar

² This term refers to Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh, the group of states in India that are known to be laggard states in terms of economic and human development indicators.

Figure 3: Suicide Rates in India (2007)



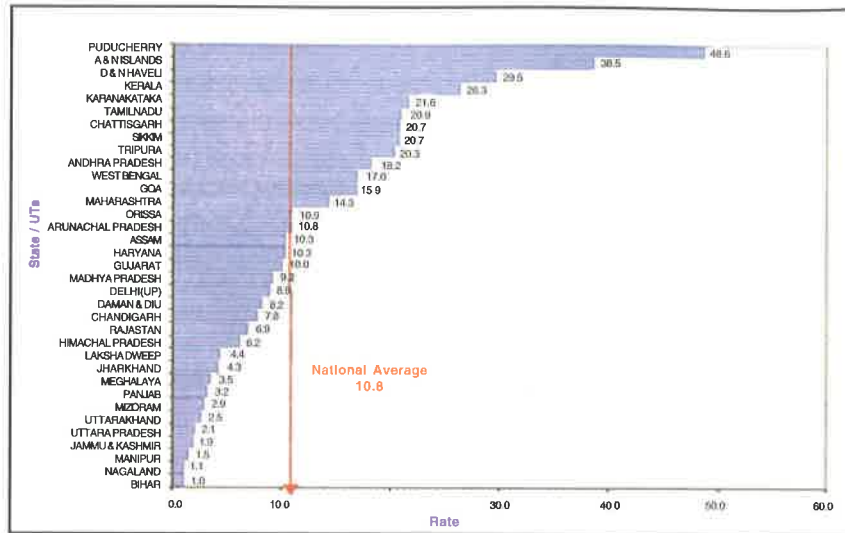
Source: Vikram Patel, paper presented at the seminar

Note: Suicide rate is per 100,000 population

Among all the SAARC countries, the suicide rate in Sri Lanka is remarkably high (*Figure 5*). From around 9 per one lakh population at the time of its independence, the rate rose to 19 per lakh population by the decade of 1970s and increased rapidly to 33 per lakh population by the mid eighties and reached 47 by mid nineties, which was the highest recorded in the world (Ratnayake, 1998). The rate has since then reduced to 25 in 2005 (*Figure 5*). Within Sri Lanka high rates have been reported in areas affected by the ethnic conflict.

The research literature on suicide in the SAARC countries can broadly be grouped into a) epidemiological studies on rates and patterns of suicide by demographic groups of age and gender in particular, and the means adopted to commit suicide; b) social science research on impact of macro issues like state policies, income disparities and health inequalities, protection during crisis and access to social capital networks; and c) front-line work on suicide risk and prevention.

Figure 4: Suicide Rates in States/Union Territories in India (2007)



Note: Suicide rate is per 100,000 population
Source: Srijit Mishra, paper presented at the seminar

Box 2

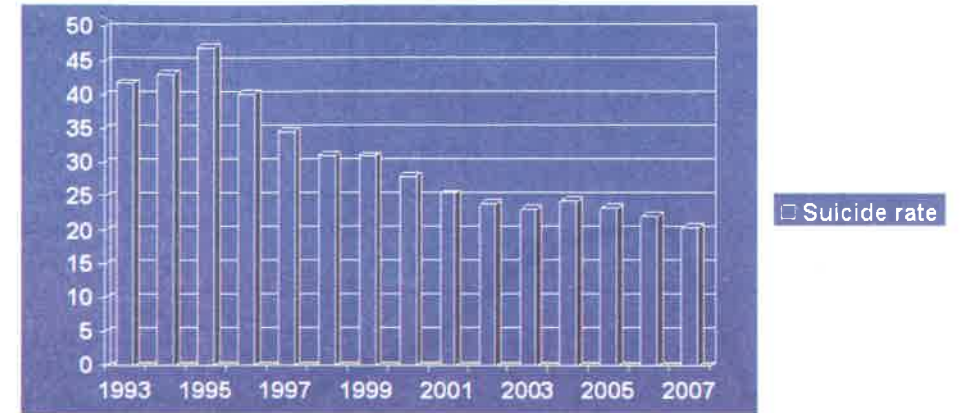
Risk factors for suicide attempts

- Gender disadvantage is major structural determinant for women
- Interpersonal violence
- Health risk factors
 - Depression
 - Chronic physical health conditions/disabilities
- Acute economic crises

Source: Vikram Patel, paper presented at the seminar

A significant finding related to age patterns in SAARC countries is that the patterns are different from those found in most developed countries (Figures 6 and 7 give age distribution of victims in India and in Sri Lanka). A high burden in the 15-29 age groups is reported in India, Pakistan and Sri Lanka with 25-60 percent of suicides in the region occurring in this age group and incidence tending to decline in higher age groups, which is not the case in most developed countries.

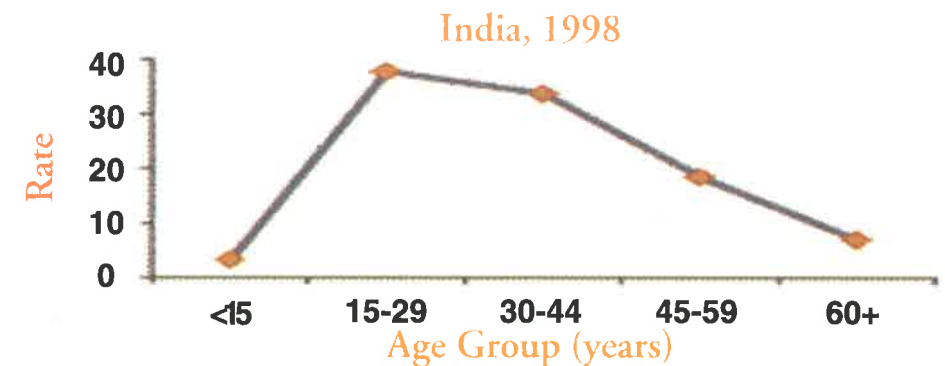
Figure 5: Suicides in Sri Lanka 1993-2007



Note: Suicide rate is per 100,000 population
Source: Lakshmi Ratnayake, 1998

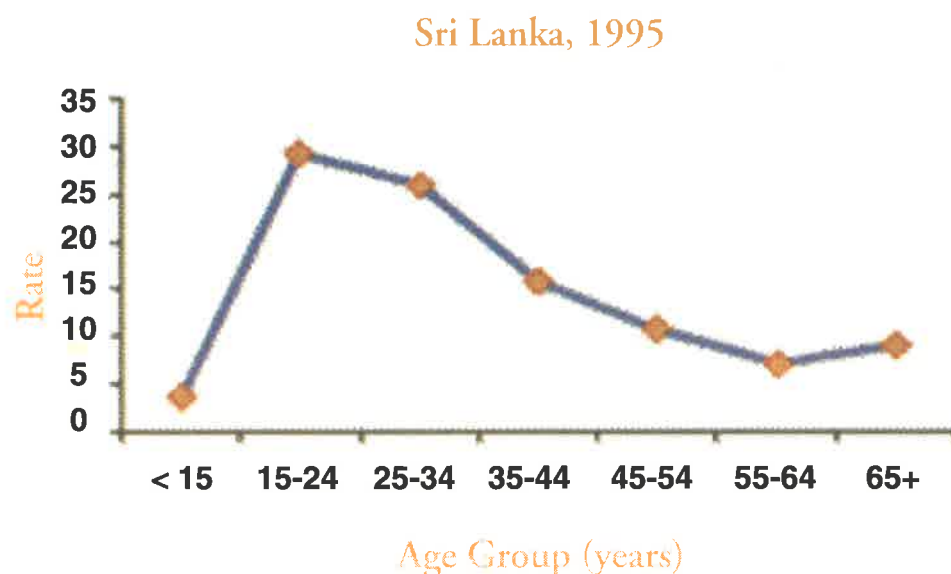
High risk of suicide was seen in the age group 25-34 for Sri Lanka as a whole and both risk of suicide and attempted suicide also were high for Jaffna especially during 1980-82 (Ganeshwaran & Rajarejeshwaran, 1989). Though the suicide rate in Sri Lanka is connected to the war, the drop in suicide rate has however been more marked for the 15-24 age group than for the 25-34 age group. The 15-24 age group also had the highest suicide rate before the war. Within India the northern states with lower suicide rates are found to be having more suicides among the younger age group (less than 30 years) whereas high suicide rate states or the southern states have more suicides in the age group higher than 30 years.

Figure 6: Age Distribution of Suicide Victims in India



Source: Daya Somasundaram, paper presented at the seminar
Note: Suicide rate is per 100,000 population

Figure 7: Age Distribution of Suicide Victims in Sri Lanka



Source: Daya Somasundaram, paper presented at the seminar
 Note: Suicide rate is per 100,000 population

The gendered nature of suicidal behaviour is well documented, with men all over the world more likely than women to kill themselves and women more likely to engage in self-harm. Similarly in the SAARC region, there is a preponderance of men who complete suicide as in the world over, but the male-female ratio is smaller by international comparison in these countries (Figures 8 and 10). In fact in countries like Bangladesh, more women commit suicide. And even within Asia, the male-female ratio is narrower in countries having medium Human Development Index (HDI), compared to countries having high HDI, thereby indicating the greater vulnerability of women, and particularly younger women, and those who are married in countries having medium HDI (Table 1). As the following table tellingly demonstrates, the suicide rate for men is higher in high HDI countries but when it comes to the case of women, the suicide rate is higher in medium HDI countries. This finding implicates the role of the country's level of economic growth in suicides by men, and is a pointer to the impact of gender discriminatory and disempowering practices on women in countries with lower levels of HDI.

Table 1: Gender Specific Suicide Rates

Gender	HDI Level	Asia	Central Asia	Europe	Europe & North America, Australia and NZ	South & Central Americas	Total
Male	Medium HDI	12.5	17.5	61.2	NA	5.9	15.4
	High HDI	20.4	NA	36.1	19.5	8.6	19.3
Female	Medium HDI	13.0	3.8	11.7	NA	1.8	11.7
	High HDI	9.8	NA	8.7	5.8	2.5	5.9

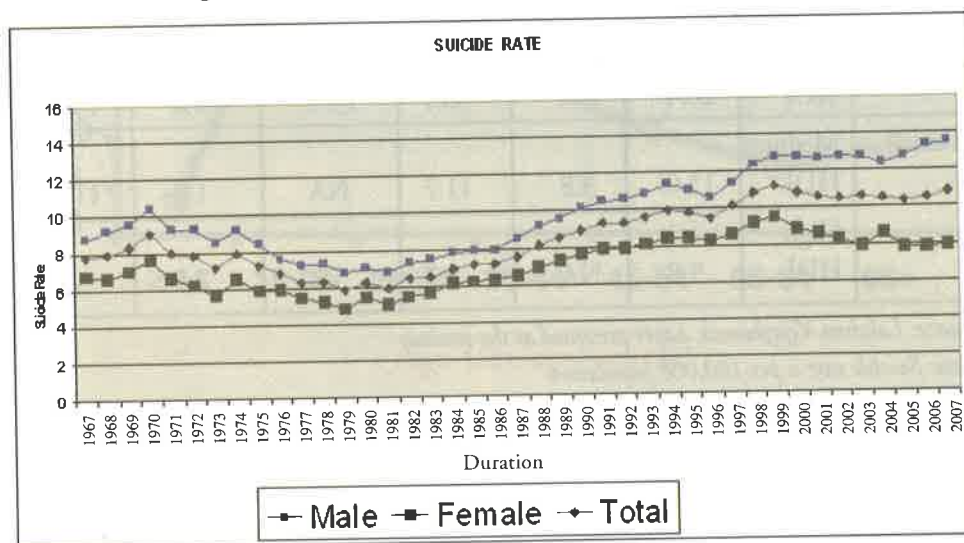
Source: Lakshmi Vijaykumar, paper presented at the seminar
 Note: Suicide rate is per 100,000 population

However, an important point to be noted about this pattern is that the male-female ratio in countries like India about two decades ago was narrower, but with the transition to a more developed economy, the male rate is found to be galloping while the male-female gap is seen to be getting wider (Figure 8). A similar trend is reported in the case of countries like Singapore that have experienced an economic upturn in recent decades, with the male-female ratio found to be initially low, but with the passage of time to a more developed economy, the male rate has gone up while the female rate is more or less maintained at the same level. The implications of this kind of a pattern have to be understood and interpreted in the context of the impact of economic growth and its upheavals and vagaries on male employment, the implicit assumption of the 'breadwinner' and 'provider' role with that of men, and its associated stresses on men.

As the present statistics show, in countries such as India, Bangladesh, and Sri Lanka, domestic violence and gender disadvantage for women have been found to be significant predictors of suicidal behavior. This risk is particularly high for younger women (Figures 9 and 10) and especially so in the case of what are termed as 'low suicide rate' states such as in north India that are also low economic growth states in addition to being states marked by gender disadvantage on a number of indicators such as education, health, economic opportunities, experience of violence and so on. In fact it is seen that there is

a preponderance of women below 30 years committing suicide in both the 'low suicide rate' and 'high suicide rate' states while in the case of men, the frequency is more in the above 30 age groups and in the 'high suicide rate' states (Table 2). These findings could perhaps be interpreted to mean that regardless of the level of economic growth, the experience of gender disempowerment is a common high risk situation for women to commit suicide.

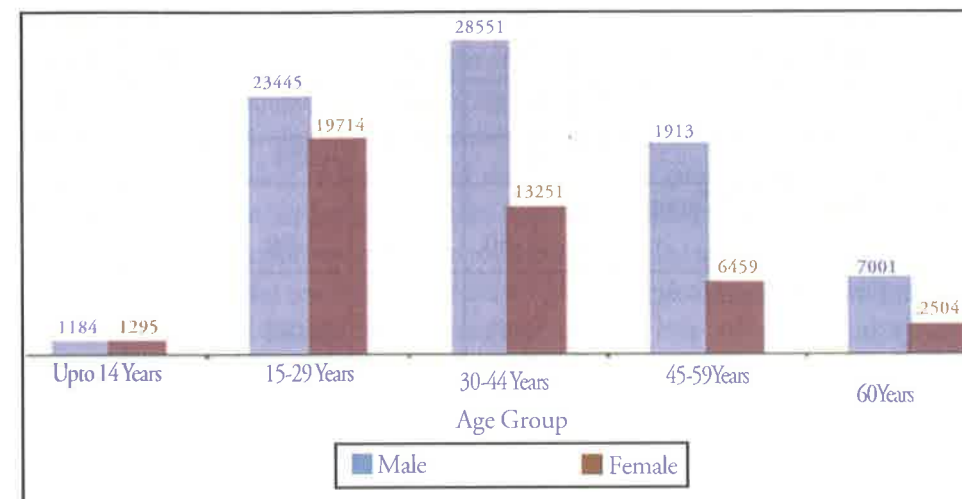
Figure 8: Suicide Rates in Men and Women 1967-2007



Source: Lakshmi Vijayakumar, paper presented at the seminar
 Note: Suicide rate is per 100,000 population

As the present statistics show, in countries such as India, Bangladesh, and Sri Lanka, domestic violence and gender disadvantage for women have been found to be significant predictors of suicidal behavior. This risk is particularly high for younger women (Figures 9 and 10) and especially so in the case of what are termed as 'low suicide rate' states such as in north India that are also low economic growth states in addition to being states marked by gender disadvantage on a number of indicators such as education, health, economic opportunities, experience of violence and so on. In fact it is seen that there is a preponderance of women below 30 years committing suicide in both the 'low suicide rate' and 'high suicide rate' states while in the case of men, the frequency is more in the above 30 age groups and in the 'high suicide rate' states (Table 2). These findings could perhaps be interpreted to mean that regardless of the level of economic growth, the experience of gender disempowerment is a common high risk situation for women to commit suicide.

Figure 9: Suicide Victims by Sex and Age Group in India (2007)



Source: Lakshmi Vijayakumar, paper presented at the seminar

Table 2: Male Female Ratio in High and Low Suicide Rate States in India

States	High Suicide Rate in age groups		Low Suicide Rate in age groups		
	< 30 M:F	>30 M:F	States	< 30 M:F	>30 M:F
Kerala	1.7:1	3.3:1	Jammu & Kashmir	2:1	2:1
Karnataka	1.4:1	2.5:1	Madhya Pradesh	0.8:1	1.7:1
Tamil Nadu	1.1:1	18.:1	Uttar Pradesh	0.7:1	1.3:1
Andhra Pradesh	1.25:1	2.5:1	Bihar	1.3:1	1.7:1
Maharashtra	1.1:1	3.1:1	Rajasthan	1.7:1	2.5:1

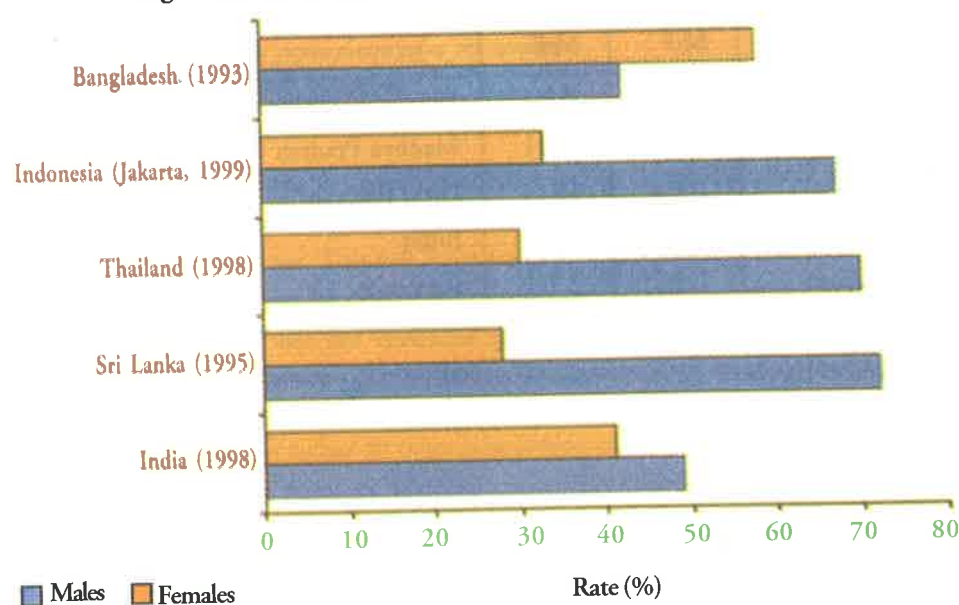
Source: Lakshmi Vijayakumar, paper presented at the seminar
 Note: M:F = Male Female Ratio

Table 3: Suicides in Sri Lanka (2003-2007)

Year	2003	2004	2005	2006	2007
Total Suicides	4607	4876	4742	4504	4225
Males	3626	3803	3708	3558	3281
Females	981	1073	1034	946	944
Most Vulnerable Age Group (in Yrs)	21-30	21-30	21-30	21-30	21-30
Second most Vulnerable Age group (in yrs)	31-40	36-45	36-45	41-50	36-45
Most Common Method (Agricultural poisonings)	2543	2672	2586	2467	2127
Second Most Common Method (Hanging)	1125	1225	1249	1158	1207

Source: Lakshmi Ratnayake, paper presented at the seminar

Figure 10: Male and Female Suicide Rates in Five Countries



Source: Daya Somasundaram, paper presented at the seminar

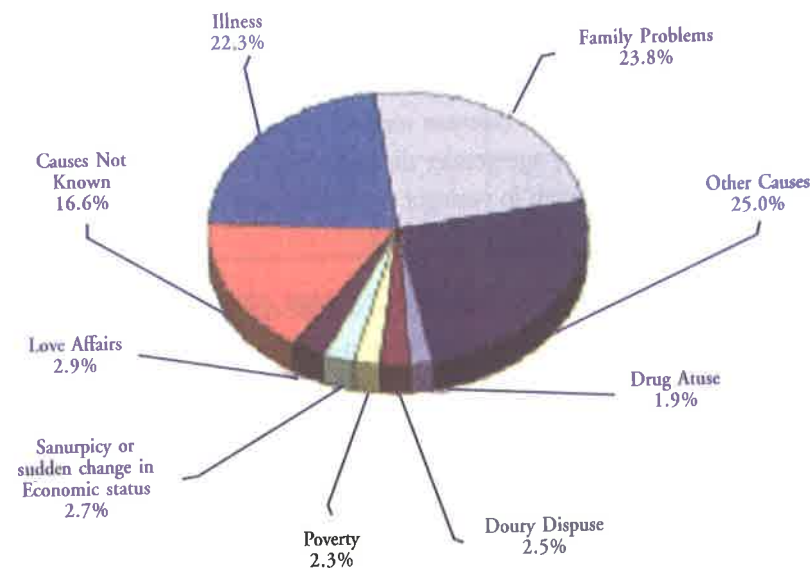
Furthermore, as in the rest of the world, the number of women who attempt suicide is significantly higher than men in South Asia. Since completed suicide is just a tip of the proverbial self-destructive iceberg and suicide attempters and completers are in fact overlapping populations, suicide attempts are an equally important measure of distress that cannot be ignored. Suicidal behavior by itself poses a significant burden of ill-health and carries with it risk of premature mortality. More importantly, unlike in the west, the overlap between suicide and attempted suicide is more pronounced in this region. Research studies from Sri Lanka and India in particular show that the extreme toxicity and lethality of organophosphorus compounds ingested (a commonly adopted means for committing suicide) and lack of availability/difficulty in access to emergency medical treatment may mean that suicidal gestures and 'cries for help' which may actually not intended to be suicides often end up as deaths (Table 3 provides statistics on the most vulnerable age and sex groups and most common methods employed for committing suicide in Sri Lanka). We may sum up this age-gender discussion by pointing out that there is high probability of suicide for women in younger age group; and that attempted suicide is more prevalent in women.

A basic and crucial concern in preparing estimates of suicide rates and trends in SAARC countries is the limitations of official data and of non-inclusion of suicide in national mortality statistics in some of these countries like Pakistan and Bangladesh. The construction of suicide statistics itself may be influenced by social and cultural factors since the stigmatization (and criminalization) of the act may lead to the possibility of turning suicide into accidental or natural death. The inadequacies of statistical information on suicide may also prevent meaningful analysis. Furthermore, there is need for taking the overall mortality profile into consideration and the relative statistical significance of each of these constituents, their impact on suicide and vice-versa, more so, when going by data on death by cause, suicide accounts for only about 1.5 per cent of all deaths (WHO, 2002). Since other illnesses may also cause suicide, the rationale for considering suicide as a separate category also becomes debatable.

In the case of India, the National Crime Records Bureau (NCRB) has been the important source of information on suicides since 1967. However the dependence on police data by taking the NCRB statistics becomes problematic for various reasons. For instance, the profession-wise data on suicides provided by NCRB from 1995 onwards includes a category termed 'others'. In recent years (2005-2007) the proportion of this category of 'others' has become high and is almost equal to that of the category of farmers (i.e., 14% of total suicides). Researchers are of the view that either farmers' suicides are being underreported due to the fact that tenants are not reported as farmers but under the category of 'others'. Besides suicides under the category of 'self employed in agriculture/

farming' also does not include all suicides in farmer households, as some of them could be reported under housewife and student categories too. In the case of state of Maharashtra in India suicides reported under the profession 'others' could be indicative of relatively higher incidence of suicides among agricultural labour or under reporting farmers' suicides. However under reporting of farmers' suicides is also serious problem in the farmers' suicide prone states like Andhra Pradesh, Karnataka, Kerala, and Punjab.

Figure 11: Per centage Share of Various Causes of Suicides in India (2007)



Source: Srijit Mishra, paper presented at the seminar

In the data on accidental deaths too, the proportion of deaths listed under 'other causes' and 'causes not known' is high (Figure 11). In view of the fact that suicide is a penal offence in Indian law, it is possible that some of the suicides could be reported under 'other' categories of accidental deaths, thereby leading possibly to gross underestimates of suicide. The need for more appropriate and accurate reporting of deaths in official data cannot be overemphasized in view of obvious policy implications for planning prevention measures. A case in point is an epidemiological study reported from Tamil Nadu in southern India wherein the high suicide rates recorded (mean suicide rate for a six year period being 95.2 per 100,000 and suicides accounting for between eight and twelve percent of total deaths) was attributed to more accurate data collection rather than being peculiar to this region (Joseph et al, 2003).

II

Socio-economic Contexts of Suicide³

The taking of one's own life is the most private of acts, yet behind each of the individual tragedies, are some social processes. A given number of suicides are to be expected in a particular society. But where the rate shows a rapidly upward trend, it is perhaps symptomatic of some basic flaws in the social fabric and disruption in social and collective cohesion. A striking feature of the occurrence of suicide in developing countries is that the relationship between mental illness and suicide is not as pronounced as in the west where nearly 90% of suicides are said to be associated with some form of mental illness. The relationship between depressive illness and suicide appears to be less evident in Asia. In our region, everyday stresses such as interpersonal relationship problems, family conflicts, domestic violence, examination pressure/failure, unemployment and indebtedness, alcoholism, chronic physical illness are identified as some of the predominant factors pushing individuals to end their lives. Thus although psychiatric disorders are often associated with suicide in the west, in developing countries, it is social, economic and cultural factors that seem to be more relevant while explaining the persistently high rates, the often 'impulsive' and stress' related deaths, and the apparent widespread social acceptability of such an option.

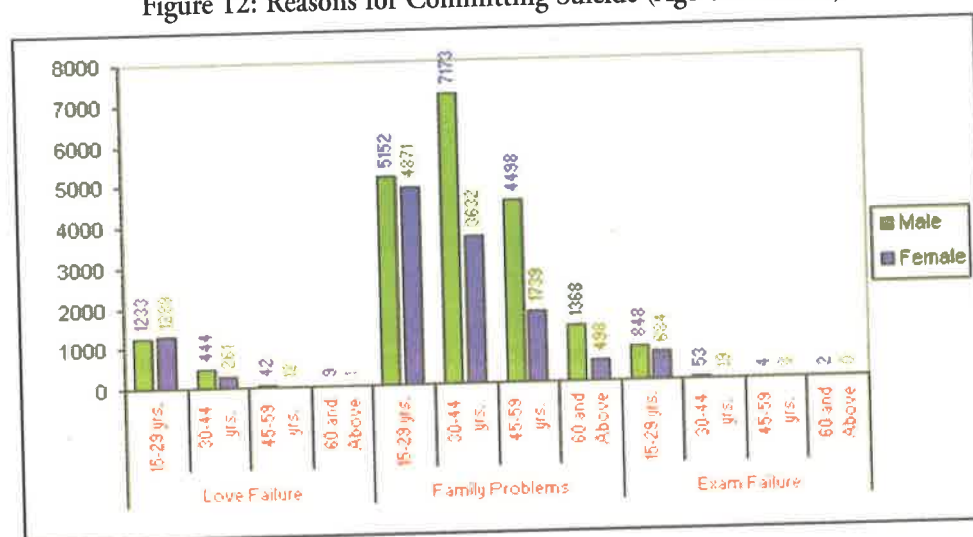
As indicated in the earlier section, of particular concern is the high burden in the 15-29 age groups in many of the SAARC countries. By contrast, the risk for suicide in developed countries tends to increase over the adult life cycle, with the decade from the mid fifties to the mid sixties constituting the age span of highest risk. Attempts by older people are also much more likely to be lethal. The ratio of attempts to completed suicides for those up to age sixty-five is about seven to one, but is two to one for those over sixty-five.

What are the social contextual factors leading to high rates of suicide in younger groups in the SAARC countries? The rise in adolescent and youth suicide in recent years in

³ This section is based on the papers presented by Krishnan Gireesh, P.Radhakrishnan, Daya Somasundaram, Vikram Patel, S.Galab, E.Revathi, Lydia Sarella, Prudhvikar Reddy and Dharmaraju, K.Srinivasulu, P.O. George, Jameela Nishat, Kapil Ahmed, Rama Melkote, and M.Kodandaram, Lenin Raghuvanshi, Riaz Hassan, and the ensuing discussions.

these countries is attributed to wide-ranging social influences such as the unsettling effects of rapid economic upheavals; the export of some of the disadvantages of developed countries to developing countries such as individualistic cultures and loss of ideals; setting in of a kind of disorientation in the Durkheimian sense in terms of a loss of hope and a loss of sense of the future, increasing anomie and atomization, decreasing social cohesion, solidarity and integration; the dissolution of social bonds and kinship networks as individuals move away from their family and community; and dearth of role models (Figure 12 shows the distribution of suicide victims according to the reason of suicide from the data obtained by Sneha, a NGO based in Chennai, India).

Figure 12: Reasons for Committing Suicide (Age & Sex wise)



Source: Lakshmi Vijayakumar, paper presented at the seminar
 Note: Based on data obtained by Sneha, a NGO in Chennai, India).

In recent years and in the context of globalization and the technology that it has unleashed, emerging socially disruptive forces are internet addiction and the rapidly changing social relations in service sectors such as the IT that has added to the prevailing social alienation. According to the 2001 population census 8,00,000 to 2 million youth attempt suicide in India each year. A cross sectional study of 3664 young adults aged 16 to 24 in rural and urban communities in South Goa in India in 2006 showed that 1000 to 2600 young adults attempted suicide over a 3 month period in Goa. Probability of attempt to suicide rises with age of the youth, where it is highest in the 22-24 years age group. The correlates of suicide attempters of young adults are, having common mental disorders (CMD); mostly female; facing physical abuse at home; experience of sexual abuse more

than once; having premarital sex; taking independent decisions and not currently studying in that order respectively.

The upward mobility processes among the youth with an emphasis on individual aspirations; the gap between expectations/desires on the one hand and opportunities/performance on the other; the loss of faith in social institutions, in particular religious institutions; and in its place, the rise of alternative spirituality are all examples of recent social transformations that have had a bearing on quality and degree of social integration or 'social capital' if one wants to employ the current buzz word.

Further studies from Sri Lanka have reported that depression, alcohol dependence and stress prevailing within families are the leading causes of suicide, in addition to low economic status, gender bias, and chronic physical illness emerging as other major factors. It can be argued here of course that depression and even alcohol dependence could itself be caused or precipitated by any factor in the socio-economic realm, pushing the individual through stages of helplessness, hopelessness, and worthlessness, thereby making such mental health dimensions as effects rather than causes per se.

The discussion also called into question the focus of organizations such as WHO's suicide prevention policy that is mediated through health and epidemiological approaches, and lacks in sociological focus in terms of strengthening social cohesion and social bonds. Conceptualizing social cohesion and bonds as social capital and as a contextual variable directs our attention toward need for group-level mechanisms such as informal social control, collective efficacy, and collective socialization in addition to the individual-level measures of drawing upon resources through individuals' connections to others (the social support mechanism), their participation and civic engagement, all of which may influence individuals' decisions about how they wish to live and whether they choose to end their lives.

Studies of suicide rates in modern types of internal or civil conflict situations have depicted a complex picture. In Sri Lanka for instance, which has recorded extremely high suicide rates particularly among the youth, attributed to social stress due to unemployment and youth unrest, there has been a decrease during the civil war in epicentre towns like Jaffna in northern Sri Lanka. A study of suicide in Jaffna showed highest risk in the 25-34 age group which was related to ethnic violence and revolt among youth (Ganesvaran, Subramanian and Mahadevan, 1984). Such towns witnessed a marked fall in suicide rate during periods of intense fighting in the late 1980s, and an increase with cessation of hostilities or in periods of relative peace. The trend is more pronounced for men rather than for women. The reduction is reported to be the most noticeable in the case

of young men, the same group in the population that joined the militant groups and is killed in the process.

Different explanations have been proposed for this reduction in rate, one of them being the *economic integration* hypothesis wherein the decrease is not due to the war per se but is mediated through other socioeconomic factors such as employment with war increasing employment rates, thus indirectly causing a negative effect. Other explanations for the reduction in suicide rates relate to concrete preventive measures such as restrictions on the use and storage of pesticides, in the context of pesticide consumption being a frequently used means of suicide in Sri Lanka.

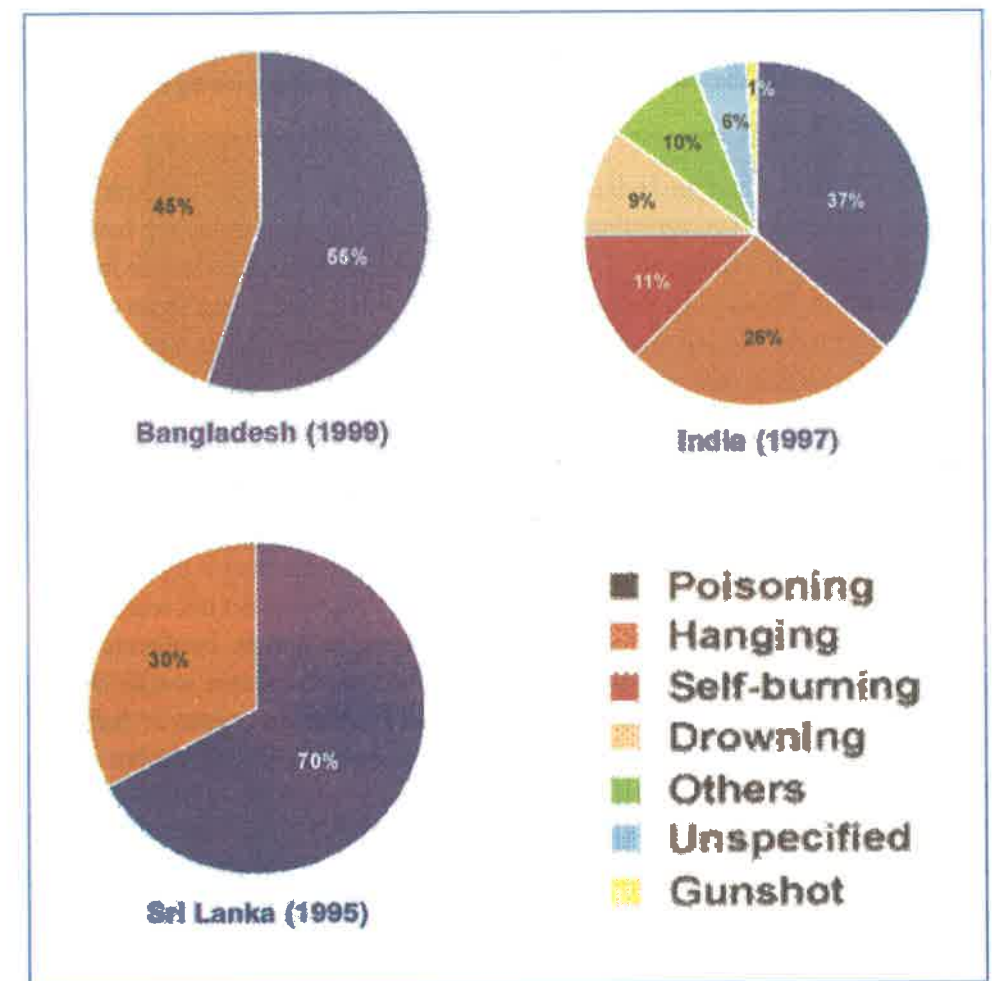
Another hypothesis is that during war situations, even if it is internal civil war, feelings of unity, forging of a sense of common purpose against the enemy, and the resultant positive emotions provide alternative opportunity for what would otherwise be suicidal behavior.

It is said that the cult of martyrdom and dying for a cause that militant groups like the LTTE favoured functioned as a socially honourable and acceptable route than suicide. It has been the contention of some scholars that suicide bombing played a significant role in the evolution of groups like the LTTE into a political organization on two levels. While the adoption of suicide squads and suicide bombing highlighted the extent to which the LTTE would go to further their cause both domestically and internationally, at another level, it was considered a weapon of war by the weaker party in an asymmetrical warfare to achieve certain objectives. By drawing attention to the self-sacrificial dimensions of suicide bombing, the LTTE was able to foster a strong sense of internal group cohesion fuelling in turn very high levels of individual commitment. However, in the case of the Tamil region of Sri Lanka, it is reported that this kind of cohesion against a common enemy could not be maintained for long due to the internecine conflicts between militant groups, and the chronic civil violence led to a fragmentation of social capital, resources, structures and functioning, resulting in a *collective trauma*.

A similar case is made out in countries like Afghanistan that in recent years has witnessed a rise in suicide attacks. Here too the suicide bombings are perceived as a weapon of the weaker party in the asymmetrical conflict between the resurgent Taliban movement and the Afghan government supported by the United States and other NATO countries. Although the key motivation of the Taliban in engaging in suicide attacks is to challenge the legitimacy of the propped-up Afghan government and to drive out the foreign occupying forces, public support to the Taliban is not substantial. Paradoxically however, because of the growing insecurity in the region, the Taliban is able to garner increasing

support as they are perceived to be able to provide security. Based on the Flinders University Suicide Terrorism database and the UN Assistance Mission in Afghanistan data, analysis of the organizational and individual motivations of the suicide bombers reveals that in contrast to other well-recognized sites of suicide bombings such as Palestine, Sri Lanka and Iraq, the suicide attackers in Afghanistan seem to be relatively younger, poor, and uneducated, with their motivations primarily drawn from religious rewards and obligations as well as ethno-nationalism and from concerns such as dishonour, alienation and humiliation.

Figure 13: Methods Used for Suicide in Bangladesh, India, Sri Lanka



Source: Daya Somasundaram, paper presented at the seminar

The method chosen for committing suicide reflects availability and cultural popularity (Figure 13). It also differs for aspects like gender, geographic location, and level of development. For example in Sri Lanka, the use of agro chemicals for suicide declined during war while Oleander or Alary seeds became more popular because of non availability of the former during the period 1980-89. Consuming cyanide which is hanged as a capsule in the neck is the popular form of suicide by Tamil Tigers during the war. Such act is in fact not considered as suicide but self sacrifice similar to the Durkheimian concept of 'altruistic suicide'. Scholars described it as sacrificial devotion with deep cultural roots. Terror experts point out that the most effective way to prevent this form of altruistic suicide is to address the underlying social injustice inequities rather than through security measures. Agro chemicals are the leading method of suicide in many parts of Asia due to its easy availability and high toxicity. High toxicity kills the suicide attempter rather than the intention to die. Women resort to means like drowning, putting themselves to fire, or hanging.

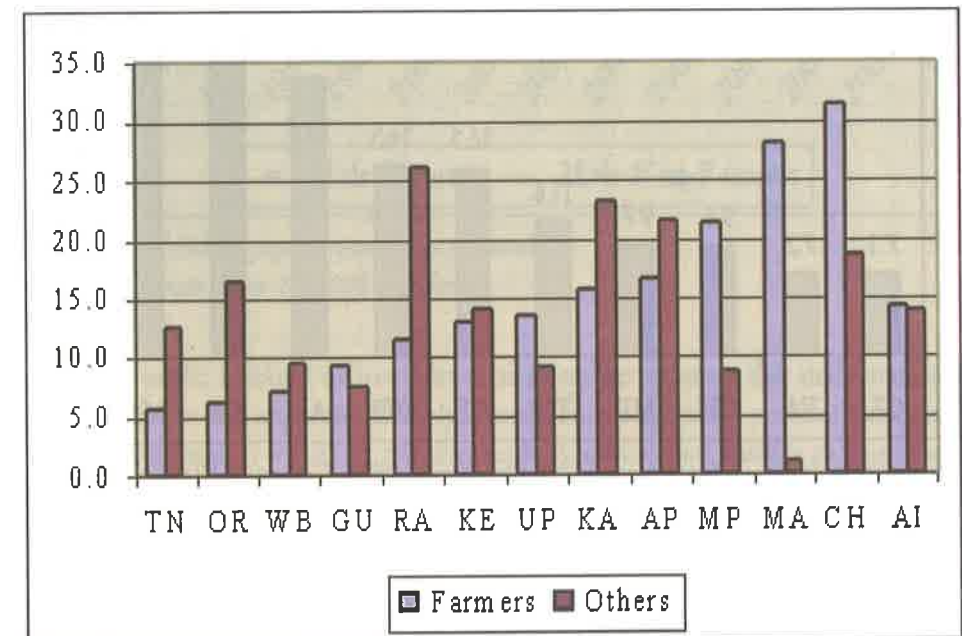
Both in Sri Lanka and in India, countries where large sections of populations predominantly depend on agriculture, farmers as a single occupational group have been found to be those at highest risk. The bulk of social science research on suicide in India, concentrated in Economics, focuses on agrarian distress as the prime factor pushing farmers to consider suicide as the only option, a phenomenon that is reported to be occurring for the first time in the known history of India.

However, suicide in significantly large numbers is occurring among entrepreneur farmers and not among subsistence farmers. By and large, suicides that occurred in the 'high suicide rate' states of Punjab, Kerala, Karnataka, Maharashtra and Andhra Pradesh are concentrated in zones cultivating commercial crops where the farmer is trying to come out of the poverty trap coupled with absence of public policy support but when he fails to do so, experiences a compounding of distress leading to suicide. Furthermore, the specific trends and correlates of farmers' suicide in India vary from state to state (Figures 14, 15 and 16 present data on suicides by farmers and by others across states in India). In Maharashtra, most of the suicides are occurring not among landless labourers, but among landed small peasants and those who have gone for new technologies or those who have been affected by the fluctuations in market prices, particularly for the cotton crop. Opening up of Indian external sector for international trade and collapse of international prices, consecutive crop failures, are some of the other reasons falling into the policy domain that have affected the farmers in this state.

In the case of Punjab, the farmers are economically well placed but the incidence of suicides is high because of the rising cost of capital investment and declined profitability.

In Kerala, it is the price domain, with the sudden fall in coconut and pepper prices and farmers not being able to adjust to it. Further, trade liberalization, exposing the farmer to the international market without any necessary preparatory work, and lack of insurance mechanisms to provide them with safety nets precipitated the farmers' distress. In Karnataka, liberal imports causing increased exposure to fluctuating agricultural commodity markets, and the increased burden of private investments on irrigation in the case of Andhra Pradesh have been found to be some of the significant driving factors besides the general factors like declining profitability of agriculture leading to suicide among farmers in these states. On the other hand, we do not hear of suicides in states like Bihar – a prime reason being its subsistence economy.

Figure 14: Proportion of Farmers and Others' Suicides in India



Note: States in India — Tamil Nadu (TN); Orissa (OR); West Bengal (WB); Gujarat (GUJ); Rajasthan (RA); Kerala (KE); Uttar Pradesh (UP); Karnatka (KA); Andhra Pradesh (AP); Madhya Pradesh (MP); Chattisgarh (CH); All India (AI).

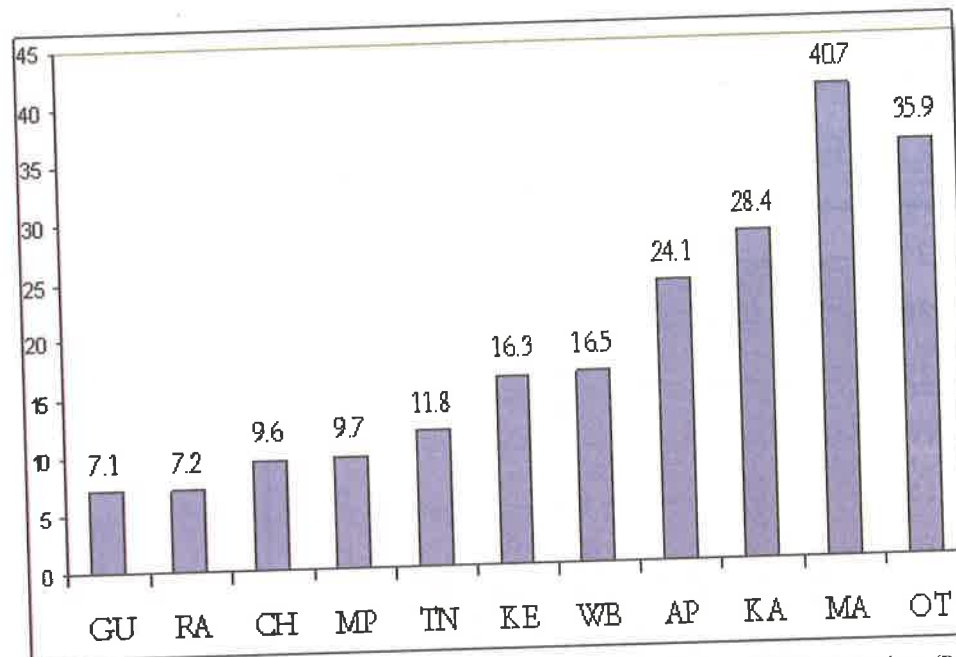
Figures on the left side indicate number of suicides per 100,000 population

Source: Srijit Mishra, paper presented at the seminar

In Andhra Pradesh, the incidence of suicide is centered on dry land areas which have increased dependence on ground water for irrigation. The high costs of informal credit, increased market volatility in output prices shift towards high value non-food crops, and

high proportion of household expenditure on education, health and social events are found to be the principal contributors to agrarian distress. The specific correlates of cases of completed suicides among farmers are that they are upwardly mobile small and marginal farmers, and tenants, mostly belonging to the social category of Other Backward Castes (OBCs), in the 31-50 age group, and predominantly male.

Figure 15: Farmers' Suicides across States in India



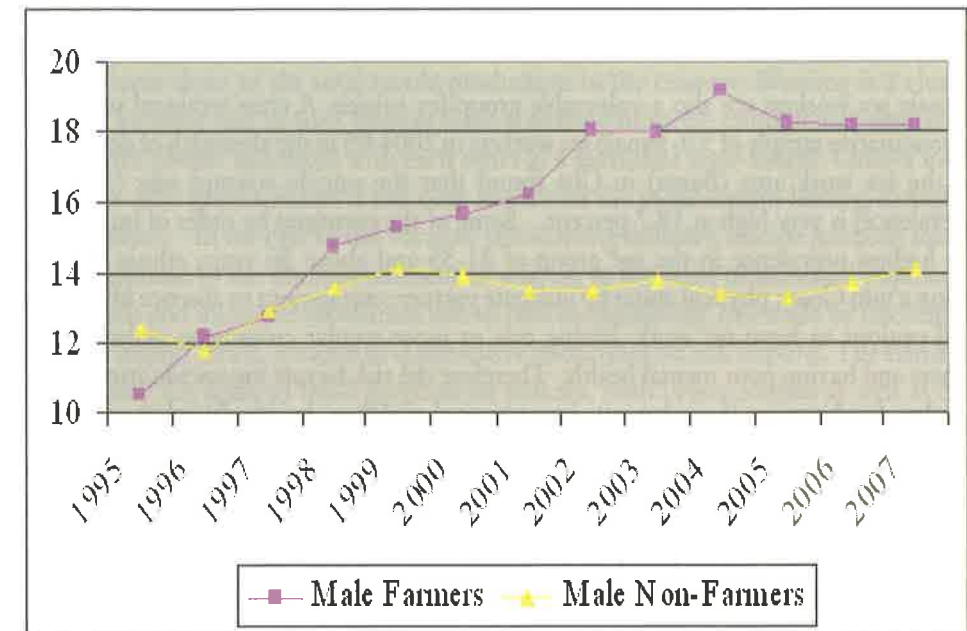
Note: States in India — Tamil Nadu (TN); West Bengal (WB); Gujarat (GU); Rajasthan (RA); Kerala (KE); Karnataka (KA); Andhra Pradesh (AP); Madhya Pradesh (MP); Chattisgarh (CH); Others (OT).

Note: Suicide rate is per 100,000 population

Source: Srijit Mishra, paper presented at the seminar

Given that most farmers who commit suicide are men, what is the post suicide situation like for the survivors – the women? Besides, suicide survivors form a significant 'at risk group' for committing suicide. Studies from Andhra Pradesh document the deterioration in household livelihoods and in the well being of children (in terms of education, early age at marriage for female children), occupational shifts from self employment to wage employment in agriculture and in some cases an inter sectoral shift from agriculture to non-agriculture. Besides, majority of survivor women suffered from emotional deficit like loneliness, self imposed isolation and threatened existence. The government relief

Figure 16: Suicide Mortality Rate among Farmers and Non-Farmers in India



Source: Srijit Mishra, paper presented at the seminar

Note: Suicide rate is per 100,000 population

package however, is found to have served as safety net to arrest this deterioration to some extent. It is also important to analyze community response in terms of humanness, solidarity, community values in the aftermath of suicide that enables to gain deeper insight into the whole post suicide situation. The above mentioned study documents that community support is highly forthcoming in resolving issues related to high levels of indebtedness from non institutional sources. However very few formal services are available for survivors in Asia and it is the small, local survivor support groups that extend some services in the post suicide situation.

The trends and patterns of suicide with reference to women have shown that suicide is high among younger age group and that attempt to suicide is also high among them. According to the 2001 population census 2 to 4 million women attempt suicide each year in India. A longitudinal study of 2494 women aged 18 to 50 on attempt to suicides, from one Primary health Centre (PHC) in Goa points out that there is 0.8 percent incidence of suicide in one year or in other words 4 women commit suicide for every 5 women in the age group of 18 to 50 years. Some of the risk factors for women suicide attempters are social disadvantage factors like exposure to violence, young age at marriage;

migrant ethnicity, family indebtedness, hunger in the three months preceding suicide attempt, physical illness and lastly mental illness falling into the category of common mental disorders (CMD) respectively.

Female sex workers are also a vulnerable group for suicide. A cross sectional study of a representative sample of 326 female sex workers in 2004-05 in the aftermath of demolition of the sex work area (Baina) in Goa found that the suicide attempt rate (3 month prevalence) is very high at 18.7 percent. Some of the correlates by order of importance are highest prevalence in the age group of 31-35 and above 36 years; ethnic status of being a non Goan; physical abuse by intimate partner; entrapment or absence of freedom and options to leave sex work; having one or more regular customers; violence from others and having poor mental health. Therefore the risk factors for suicide attempts are gender disadvantage (for women), interpersonal violence, health disorders and acute economic crises.

Socio economic conditions are very common related to gender issues across the SAARC countries. However vulnerability of women to discrimination and violence varies with religion, geographical location, class, ethnicity and caste. Violence against women especially in private spaces is a common phenomenon accounting for a high suicide rate among young women. While analyzing the socio economic context and causes for suicide among women it is important to address the whole issue of gender relations. The institution of family and the transformation it is undergoing needs to be addressed thoroughly. Besides family, the social construction of institutions of state and civil society also deeply impact gender relations. The neo liberal reforms taken up by the Indian state is leading to loss in livelihoods for poor which can not simply be compensated through some economic packages. Literate human resources facilitate integration of markets hence policies and programmes like adult literacy and education are taken up for women. World Bank policy sees women as best managers of poverty which led to state interventions like social mobilization of women for tackling absolute poverty. Studies on women's self help groups in Bangladesh or in the state of Andhra Pradesh in India reveal a rise in domestic violence on women participating in such groups, which throws up a complex set of issues which need to be understood.

Besides agriculture, another sector that has been affected adversely is the handloom (cotton and silk) and traditional power loom sector in states like Andhra Pradesh and Uttar Pradesh in India. Suicides have been recurrent in specific clusters in certain districts of Andhra Pradesh such as Sircilla in Karimnagar, Chirala in Prakasham and Dubbaka in Medak, and in Varanasi in Uttar Pradesh, since over two decades now.

The need for examining the crisis in the weaving industry in these specific clusters is emphasized in view of the fact that uniform national and state policies exist for the industry as a whole and that the handloom sector has managed to maintain a steady 20 to 25 percent share of the total textile production in the country. Weaving is a cluster oriented industry and in such clusters there is sharing of social, cultural and emotional factors with people associated with each other at a particular wave length. Once a socio economic crisis grips a cluster it has deep impact on the social esteem leading to higher rate of suicide. In the case of the Varanasi silk weaving industry, suicide has been found to be a response to the disempowerment of weavers in the wake of increased popularity of synthetic and imported substitutes due to policies promoting free trade by freezing or lowering import tariffs, removal of quantitative restrictions on silk imports. The Banarasi sari industry has suffered from government policies, both protectionism as well as free trade. A ban was imposed on Chinese raw silk between 1995 and 1998 as a measure of protecting domestic silk industry which increased the cost of production due to higher domestic cost of silk supplied from Bangalore. Besides, the multi-layered feudal hierarchical production structure denied the producers direct access to markets resting the control of the industry in hands of traders. The fixed piece rate system in the industry facilitates the middlemen earn more profits during times of good demand and when demand falls workers suffer from non inadequate work which is typical of hierarchical production system. The recent global economic slowdown also impacts the industry with reduced demand.

The other important aspect is absence of social security measures for the weavers who face severe occupational hazards like respiratory ailments, tuberculosis, particularly Multi Drug Resistance Tuberculosis affected due to exposure to silk and cotton fibres. Due to lowered income levels weavers and their household members face malnutrition and exhaustion. About half of the suicides in Varanasi silk industry are related to hunger and malnutrition, another 30 percent due to poverty and economic hardship, and 20 percent due to disease, and indebtedness. Starvation is highly prevalent among weaver households and such households are more prone to suicide. Studies conducted by institutions such as the National Institute for Nutrition confirm that starvation and suicide deaths are closely related in that hunger and malnutrition are likely to lead to mental illness. And if the situation is compounded with harassment for repayment of debts or chronic health disorders or household discord, then all these factors could trigger off suicide. Alcoholism is also a severe problem among the weavers who resort to it due to severe exhaustion faced as a consequence of their work hours and working conditions. Absence of adequate public health facilities catering to their specific health needs often leads to high private expenditure and hence perpetual indebtedness is a main cause for suicide.

In the case studies from the handloom and traditional power loom weaving households from Andhra Pradesh, the important suicide-risk factors are located along the spectrum of economic reasons – non-availability of work, low incomes, and high indebtedness. The handloom industry in Andhra Pradesh is organized under three different institutional setups viz., cooperative, master weaver and independent weaver. Liberalization policies followed from 1990s onwards have led to changes like increase in yarn price due to exports and high excise duties on yarn, removal of quantitative restrictions thereby leading to dumping of cheap imports from China and Thailand, resulting in soaring costs of production and stagnant returns. In the case of traditional power loom industry the power looms were removed from the small scale sector thereby facilitating big producers an entry. Besides customs duty on imported machinery has been reduced, subsidies to import were increased under the Technology Fund Up gradation Scheme (TUFS) thereby making market conditions tough for the traditional power loom sector. In fact the 1985 Textile Policy has shifted orientation from employment to productivity thereby pitting small and employment oriented weaving against large scale high productivity technology. Thus small scale weaving, either handloom or power loom suffers from three sets of problems viz., production related stress, occupational health hazards and lack of social security measures thereby making it vulnerable to distress and hence suicides (Table 4 provides statistics on suicides in handloom and power loom industry in Andhra Pradesh).

Table 4: Suicidal Deaths among Weavers in Andhra Pradesh (1997-2008)

District	Handloom	Powerloom	Total
East Godavari	6	0	6
Krishna	1	0	1
Prakasam	24	0	24
Nellore	8	0	8
Chittoor	3	0	3
Ananthapur	54	0	54
Kurnool	4	0	4
Mahabubnagar	12	1	13
Medak	3	2	5
Karimnagar	12	306	318
Warangal	48	3	51
Nalgonda	46	0	46
Guntur	2	0	2
Cuddapah	3	0	3
Hyderabad	1	0	1
Total	227	312	539

Source: Directorate of Handlooms and Textiles, Government of Andhra Pradesh, 2008

In India the state of Kerala is said to be known as suicide capital for consistently higher rates of suicide than the national average (three times that of national average). Kerala which has performed impressively in almost every aspect of development puts forth the case of positive relationship between suicide rate and development akin to developed countries. In a way it can be termed as 'western model in an eastern setting' where developmental indicators are comparable to the best in the developed world. Sociological transformation within Kerala also appears to be similar to that of west in that the family system is moving towards nuclear (80-85 percent) in rural context and towards single-parent in the urban context. The characteristics of suicide like high rate among children (< 14 years of age) ; high rate among adult men of age group 45-59; also considerably high rate among senior men (above 60 years of age) are the same as seen in the context of western countries. On the other hand Kerala has long history of social reform movements, and social capital of the nature of both bridging and bonding which should be working as antithesis to the high suicide rate. Transformation process experienced by Kerala in recent times in terms of rising migration of youth to Middle East countries and its concomitant effects for the economy and society; invasion of media into peoples' privacy thereby affecting the bonding within families have emerged as some factors which have impacted on interpersonal relationships.

What is the role of the media in the whole issue of suicide? How should media report news of suicide? Are there any ethical standards to be followed while reporting? A popular syndrome is 'copy cat suicides' which denotes that suicides multiply as a possible consequence of the wide publicity and reporting of suicide by the media. In fact Oleander or Alary seeds became a popular means to commit suicide in the mass media through daily news papers and a particular South Indian film. Again one can say that the positive as well as negative dimensions of reporting suicide can not be seen in isolation but should be placed in the socio economic context. When causes for suicide are located in the private domain then intruding into the privacy of the family and extracting details to report and make sensational news to gain popularity only pushes the family into more pain and agony. There are guidelines set by WHO and other statutory bodies on reporting suicides against displaying suicide related news prominently on the front pages. However, the guidelines as to the mode of reporting should be forthcoming from society, as media is not governed by WHO guidelines.

Causation for suicide in the context of occupational groups is seen more in the social realm, in which case exploring the factors contributing to suicide helps in a number of ways viz., sensitizing the state, demanding or lobbying for correction of distorted policies, or regulating market inadequacies, and lastly to help the bereaved family to receive financial compensation from state and civil society. In fact it is noted that inadequate

coverage is given to rural sector, its economy, culture and society in the National press in India thereby brushing its problems under the carpet. In the Indian context media has played a commendable role in highlighting the distress conditions of rural production sectors thereby acting as a moral suasion for the state to take up ameliorative steps. The print media also has played an important role in recording suicide deaths, often being used as an alternative data set on suicide.

III

Disciplinary Perspectives on Suicide⁴

The trends, patterns and larger socioeconomic contexts of suicides discussed in the earlier sections indicate that the incidence of suicides has been increasing over time; the gap between the incidence of suicide between men and women has been increasing over time; and although the incidence of suicide among men is seen as higher, the incidence among women has been increasing with attempted suicides too being higher among women. The trends also indicate that the incidence of suicides among youth has been on the rise as is the case with certain occupational groups. These patterns worldwide have thrown up challenges to provide explanations for the phenomenon of suicide and different disciplines have grappled with varying explanations, depending on their unit of analysis.

As we probe into the multiple causes of suicides, we find that explanations abound from as wide-ranging disciplines as cultural studies to biochemistry. Just to give a sense of the immense range of scholarly work on the topic of suicide, ranged on the one hand for instance, are philosophical writings, stemming from European existentialism in particular, alluding to the individual's choice to live as the only truly serious philosophical problem (for example, in the writings of the French philosopher, Camus). Social scientists, on the other hand, have sought to examine issues such as state policies, income disparities, and health inequalities, protection during crisis, access to social capital networks, participation and civic engagement, and their impact on suicide rates and trends. While epidemiological and social science research has tended to be grounded in large samples, analyzed statistically to generate hypotheses, causal models and deduce law-like propositions, these research findings may not be perhaps of much use for the front-line suicide prevention clinician if they do not speak to the pain, agony and needs of individual would-be suicides.

While mental health professionals may view suicide primarily as a mental health problem,

⁴This section is based on papers presented by R. Radhakrishna, B.D.Lahoti, D.Narasimha Reddy, P.Radhakrishnan, K Srinivasulu, K.C. Suri, Daya Somasundaram, U.Vindhya, S. Galab, Vikram Patel and the subsequent discussions.

social scientists on the other hand, may balk at the view, and instead perceive it as an outcome/fall out of macro processes such as generalized conditions of social disruption or disorganization or faulty state policies. The task of identifying causes and correlates becomes all the more difficult as both risk and protective factors can vary by age, gender, ethnicity, region, and just about any factor. The task becomes all the more arduous as the literature reveals risk factors that are so numerous that it appears as if each one has little predictive power.

Answers to the crucial question 'why' of suicide are rendered difficult because of the multifactorial origins of the phenomenon. In this sense, it is perhaps misleading to speak of *the* problem of suicide because it is not one problem, but is in fact many different and overlapping yet somewhat distinct problems.

After the last several decades of research, it is now more commonly acknowledged that suicide is a multifactorial phenomenon with global, national, and local factors intertwining with psychological states of the individual to produce suicidal behaviour, the particular discipline of study may influence the analysis. As a function of its multidisciplinary nature, the relevant suicide literature is spread across a wide variety of professional literatures including medicine, psychiatry, nursing, and psychology. The fundamental disagreement between the social science literature on the one hand and that of the mental health disciplines on the other relates to the differences between those who view suicide as a consequence of policies and institutions of the social structure as in the case of the former versus those who view it as an individual attribute as in the case of the latter. While this disagreement may have to do with the disciplinary bias in terms of level and unit of analysis, there seemed to be, in the course of the seminar discussions, a broad consensus on engaging with both levels. The question about the theoretically appropriate level for analyzing a phenomenon such as suicide ought not to be couched in terms of a dichotomy (either the individual level *or* the structural level) – rather it is both, pointing to the necessity of adopting a multi-level analytical framework.

While for economists, the domain of study may be structural changes due to paradigm shift in policy the agrarian distress as a case in point in view of the fact that it is suicides of farmers (in India) that is preponderant, for psychologists and other mental health professionals, it may be psychological stress. The point to be noted here is that the domain could be large, but the occurrence of the event may be rare. For analysts to capture the factors underlying the occurrence of each event may be difficult. Going by the probability method commonly used by economists, they locate the domains in which there is a probability of occurrence of suicides but where exactly it is going to occur may be difficult to say. Economists attempt to know what domains are vulnerable and

also explain why certain domains are vulnerable and what factors influence the probability of occurrence of suicides, why it varies across regions, class and social category and why and how macro economic factors influence the probability of occurrence of suicide.

Historically speaking, it is perhaps appropriate to begin with Durkheim's classic sociological work on suicide that demonstrated that even a seemingly individual and private act such as suicide is subject to variations in social structure such as modernization, secularization, the breakdown of extended family systems, the development of 'free inquiry', and other social forces that throw normative boundaries into disarray and weaken individual regulation. However synonymous Durkheim is with the principle of anomie as his seminal contribution to the discipline of sociology in general and to the study of suicide in particular, mention must be made of his four-fold typology of suicide, based on his findings of the relation between integration and regulation and suicide. In this classification, suicide was *egoistic* (that springs from excessive individualism of persons not integrated into society through religion and/or marriage), *altruistic* (as a result of insufficient individuation), *anomic* (transitions causing loss of regulation of life) or *fatalistic* (deriving from excessive regulation).

This typology stemmed from his assessment of the broad historical processes transforming the basic relations between society, culture, economy and the person. Essentially he wanted to demonstrate that the suicide rate provided a measure of social pathology. He perceived anomie and egoism as a result of collapse of traditional restraints, thereby using their incidence as an index for social pathology. In his view, the rate of *egoistic* suicide measured the decline of self-restraint while the rate of anomic suicide measured alienation. The essence of Durkheim's theory lies in his conceptualization of the two scales (*regulation and integration*) in which according to him, a drastic calibration in either direction is likely to contribute to the increased prevalence of suicide. In his view, egoism and altruism reflect lack and excess of *regulation* respectively, while anomie and fatalism reflect lack and excess of *integration* respectively. Therefore, societies with a high degree of social integration or cohesion have low suicide rates while low integration produces high rates of suicide. For example, societies with strong religious beliefs and practices like Catholic and Islamic societies bind people together, and suicide rates tend to be low; while in Protestant communities where the ties may be more in the nature of *laissez faire*, suicide rates are high.

Durkheim maintains that when a society is strongly integrated, it holds individuals under its control, since individuals cling to life more when they find it meaningful. On the other side, excessive individualism undermines social solidarity by promoting the notion that the individual, rather than the group, must decide issues on the value of human life, even though the individual is unable to accomplish this alone.

According to Durkheim, each society is characterized by a remarkably constant suicide rate, *sui generis*, a specific tendency to suicide. However, suicide rates fluctuate with major social upheavals or socio-economic forces. Increased suicides during the Great (economic) Depression of the 1920s and fall of suicide rates during wars are an indication of this relationship. Increased rates of unemployment, financial crises are found to be underlying causes for high suicide rate in times of economic recession and depression. Similarly notions of 'martyrdom' and 'death for a cause' could explain low suicide rate during war period. Thus, suicide is socially constructed and it is this social construction that is internalized by the individual leading to the decision to commit suicide.

In recent decades, the emerging technological changes in communication and information spheres in the form of internet and electronic media have brought changes in the entire psyche of people, especially among youth. This has brought considerable changes in socialization mechanisms leading to tremendous social disintegration. The cyber space and internet serial killings stand as a testimony to the impact of such social disintegration. The basic unit of society that is the 'family' does not perhaps exist anymore in its earlier form. The first phase of the collapse can be seen in the breakdown of the joint and extended families subsequently leading to the emergence of nuclear families. In what we may call the 'second phase of collapse' the nuclear families are getting transformed into atomization of individuals due to these technological changes. The atomization of the individuals is a kind of antithesis of socialization. The society which survived for centuries in a structured way with group orientation and with group mindset is being transformed to individualized orientation. To take a common example, the television set — one in each bedroom — has perhaps been instrumental in reduced interactions within the family, and with friends and the community.

Another example which is illustrative of social disintegration is the case of youth aspiring for upward mobility who experience however a mismatch between their aspirations and capabilities. In what we can term as the 'catching up process', the aspiring, who are embedded in unequal, disadvantaged situations, often see no other option but suicide, when they fail to 'catch up' with the 'mainstream' in various social, economic and cultural realms. The erosion of the family system is also accompanied by a corresponding loss of faith in well established social institutions. A small study on Special Economic Zones (SEZs) in Goa reported that in several places the social harmony and bonding had been effected because of high levels of migration that were seen to have an impact on the ecology of Goan society.

In the context of developing countries and more so in the case of the SAARC countries, a more globalized economy and society can be cited as an example of economic upheaval in recent times. A case in point is the Indian farmer exposed to the international market without adequate preparatory work pushing the traditional informal sector of agriculture and handloom weaving into vulnerable domains. Suicides have occurred wherever the farmer is trying to improve his economic position by adopting modern technology in the globalization regime. The changes in the economic forces brought through globalization have increased the incidence of suicides. The farmers/weavers relationship with the input and output markets has changed after globalization and they have not been able to come to grips with the new situations that have emerged as consequences of globalization. This has led to an increase in the incidence of suicides.

What does the discipline of economics have to offer by way of explanations and perspectives on the phenomenon of suicide? The following discussion is confined to mainstream economics or the neo-classical standpoint that is based methodologically on 'individualism'⁵. There is also a range of structuralist approaches that emphasize inequalities, natural and market volatilities that aggravate vulnerabilities, inappropriate policies or failure of the state as some of the factors that trigger off suicides. Since the structuralist approaches are closer to the Durkheimian perspective, which is dealt with at length in this section, the present discussion is confined to the mainstream neo-classical perspective only. Furthermore, the second section in this monograph on the socio-economic contexts of suicide provide illustrations of the structuralist approach while explaining the causes of suicides in the production sectors of agriculture, weaving and so on.

The discipline of economics reduces everything into some kind of a cost that may not reflect other than monetary values. It is held that the total components of life which create happiness are amenable for calculation and the cost of achieving that happiness can also be arrived at. Suicide appears as a viable option in terms of an economic choice between life and death if the total value of happiness is much less than that of the costs involved in attaining happiness. Economic theory that tries to explain why people take decision to commit suicides is built on the following basic premise which is that the very unhappy or miserable individuals have a number of choices, apart from committing suicide, such as taking drugs; starting or resuming smoking, drinking heavily; gambling heavily; committing crimes, taking up highly risky jobs; engaging in very risky sports, marrying in haste, getting divorced, seeking professional psychiatric help etc.

⁵ *The discussion on the economic perspective on suicide depends on the arguments put forward by Becker and Posner (2004).*

Suicide is a purposive action that compares the benefits of continued living with the benefits of death; unhappy individuals compare the benefits and costs of different actions before deciding on the best, or least worst; unhappy people assume to maximize their utility in a forward-looking fashion, taking account of the uncertainty of future events, and the consequences of their actions. Many so-called accidental and natural deaths too have a suicide component; and insights of sociologists, psychiatrists, and philosophers about the factors that determine suicides and other actions of distressed and unhappy individuals are also taken into account by economists in analyzing the reasons why people decide to end their lives.

Does the cost of the act of suicide halt suicide? It is apparent that the act of suicides itself has a price. Even if utility from living is expected to be negative in all future periods as well as at present, a person will not commit suicide if the price is high enough. The smallest element of that price is the monetary cost and time cost of committing suicide. More important costs include the evolutionary adaptive fear of death; the pain and other unpleasantness of the actual killing, including risk of failing and being left crippled; and the possibility of supernatural sanctions, such as loss of afterlife utility and incurring afterlife disutility. More desperate persons tend to use method with higher probability of success. This is partly because the less desperate persons mainly need a little more sympathy. Methods with relatively low probabilities of success may be sufficient to get them enough sympathy to make it worthwhile to continue to live. The use of lethal pesticides in farming facilitated them with 'no cost means' in the event of suicide.

The economic perspective thus assumes that people compare the expected utility from living with the expected utility from death. Does religion matter in the decision to commit suicide? Most religions like Christianity, Islam, and to a lesser extent, Judaism encourage a favorable view of life after death for deserving souls. Since this raises the expected utility from death, it also raises the range over which death appears preferable to continued living. The effects of such perceptions are likely to raise the effective rate of suicide. Probably to counter this implication, some religions, especially Catholicism, strongly condemn suicides.

A relevant question to ask in this context is why do unhappy individuals commit suicide overlooking his/her dependents' well-being? The expected utility loss or gain from committing suicide could depend on whether a person is concerned about the effect on spouse, children, or others. He might be discouraged from committing suicide solely because he is concerned, and they would be especially unhappy if he died by taking his own life. The role of such mutual interdependence in preferences implies that single persons, childless couples and those without close friends are more likely to take their

own lives. But for people who do not weigh heavily the effect of their suicide on the utility of family members and others, their suicides would impose an externality on these others. In this case, *pareto-optimality* considerations would provide a defense of laws and norms against suicide that goes beyond the motivation to offset the attractions of an afterlife. The expected utility from suicide compared to continued living could be high if persons he cared about would profit from his death. A view point that emerged in the context of farmers and weavers suicides in India is that relief package given to the kin of the suicide victim also acted as expected utility from suicide compared to continued living in desperation.

A second question that could be raised is why does an unhappy individual postpone suicide? Utility maximizing individuals recognize that there will be no second chance if they are killed or permanently injured from actions that might eliminate their present unhappiness. As a result, even very unhappy persons might decide to postpone drastic actions in the hope that their situations will get better in the future. They can always take these actions later if their misery continues or worsens. The opportunity to postpone to the future provides unhappy persons with an option of value from waiting. The value of the options from waiting depends on several variables with a clear economic interpretation. If the value of waiting is smaller, the greater is the discount rate on future utilities since the discounted value of future benefits is then smaller relative to the present cost of being miserable. Even with the same degree of happiness, this implies more desperate actions, including suicide attempt, among poorer, less educated, and younger persons since they tend to discount the future more. In the context of the production sectors, a favorable monsoon or expected price for produce and friendly policies may enhance the future benefits thus lowering the incidence of suicides in this sector. In the case of older people, their utility tends to increase less rapidly over time since their physical health and mental capacities may be diminishing increasing thereby the likelihood of suicide.

Thirdly, why does an unhappy individual prefer risk? Unhappy people often take risky actions that appear to be desperate acts and even irrational. Persons at the bottom end of utility distribution are likely to be risk preferring rather than risk averse. They are willing to take risks, even with bad terms, that might pull them out of their bad circumstances. Such risk-taking behavior takes many different forms. Unhappy individuals turn to drugs, gangs, alcohol dependency and abuse, overeating, risky jobs, etc. in often desperate efforts to find a way out of their circumstances. They are willing to take these risks to their lives because they would be worse off if they did not. Criminals too tend to be risk-preferring. This is due to the fact that criminals tend to be at the lower end of the utility distribution. Crime offers financial and other types of utility gains that provide an escape

from the somewhat desperate conditions that caused willingness to take even bad risks, if not apprehended and convicted. The link between risk taking and suicides also has some interesting implications for the current phenomena of suicide bombers, and the much older phenomena of martyrs and heroes.

After Durkheim, the notable French philosopher Albert Camus stated that it is absolute nihilism that justifies suicide and observed that nihilism is intimately related and involved with frustrated religious movements which then tend to culminate in terrorism. Many philosophers have observed this mix-up of religion and politics leading to a dangerous situation in which both the true spirit of religion and politics gets destroyed. The live example for mixing up of politics with religion is the creation of Palestine. The terrorists talk politics on a religious platform and religion on political platforms and in the process they destroy the best nuances of both institutions.

It is necessary to distinguish between actual suicides and suicide attempts. Why do women and teenagers have very high ratios of attempts to suicides? Of course, the proximate reason for why women succeed less often is that they choose methods that are less likely to succeed than those chosen by men. But why do women choose these methods? One compelling explanation could be that women can get sympathy more easily than men, although women may be less familiar with more lethal methods. It has also been noted that women not only have much lower propensity to commit suicides, but also that they are far less likely to die from drug overdoses, alcoholism, homicides, and other self-inflicted causes. The same story may explain the high ratio of teenagers' attempts to commit suicides. This analysis suggests two separate variables; the ratio of suicide attempts to successes, and the rate of suicides. Both women and teenagers have much higher attempt ratios than adult men, but women have a low actual suicide rate while in the case of teenagers in recent years we are seeing a reasonably high rate. This could be due to deterioration in their utility levels due to the increase in the disintegration of families.

Social, political and economic upheavals destabilize the economy, polity and society and it is this process of destabilization which then pushes population groups, communities, geographical regions, into vulnerable situations. Conflicts over resources, markets, territories have led to shift in ideologies, policy paradigm, and regime shifts. Political power often dictates such shifts. The state dominantly seen as provider has donned a new role as regulator and as more of a facilitator for market reforms. However, the state in most developing economies has allowed for an unequal play between domestic and international production sectors without achieving an adequate level playing field, thus pushing massive occupation groups to the brink of non viability, and poverty. Even at the cutting edge level state support has not been forthcoming to newly emerging sections exhibiting signs of upward mobility especially in agriculture.

Although the sociological and economic explanations point out the social and economic forces that increase a person's probability of committing suicide, they may not be able to predict exactly which individuals are likely to actually commit suicide. It is here that psychologists' study of individual behavior could provide much more useful explanations. A broad consensus that emerged during the seminar was that none of these disciplines really had opposing points of view. Predominant theoretical models of suicide in the field of psychology are multidisciplinary in nature since all of them consider the biological, psychological and environmental factors that may impact suicidal behaviour. It is also seen that many of these models represent a form of post hoc theorizing.

For those in the mental health disciplines, clients present themselves with depression and suicidal ideation that are often intertwined in a complex pattern of concerns about education, finances/jobs, and interpersonal relationships.

The Suicide Trajectory Model proposed by Stillion et al (1989) is an interactive multidimensional model that speaks of the interaction of biological, psychological, cognitive, and environmental risk factors that bring a person to the brink of suicide. Biological risk factors include a genetic predisposition to depression while psychological risk factors refer to depression including the feelings of hopelessness, helplessness, and worthlessness that are so typical of suicidal ideation, and to poor coping skills. Relevant cognitive factors include cognitive rigidity and various cognitive distortions such as the tendency to be less skilful at generating alternative solutions and anticipating negative consequences, and to be more likely to come up with inappropriate solutions to problems. The tendency to display over-general retrieval of autobiographical memories and reduced ability to remember specific positive experiences are also illustrations of cognitive distortions. Environmental risk factors refer to negative family experiences and other adverse life events, loss and also the presence of firearms and other means of suicide. Different combinations of these risk factors and the presence of a triggering event is likely to result in suicide. Indeed, this model focuses on this triggering or "final straw" event in the presence of specific thoughts about suicide as a viable option that may result in suicide.

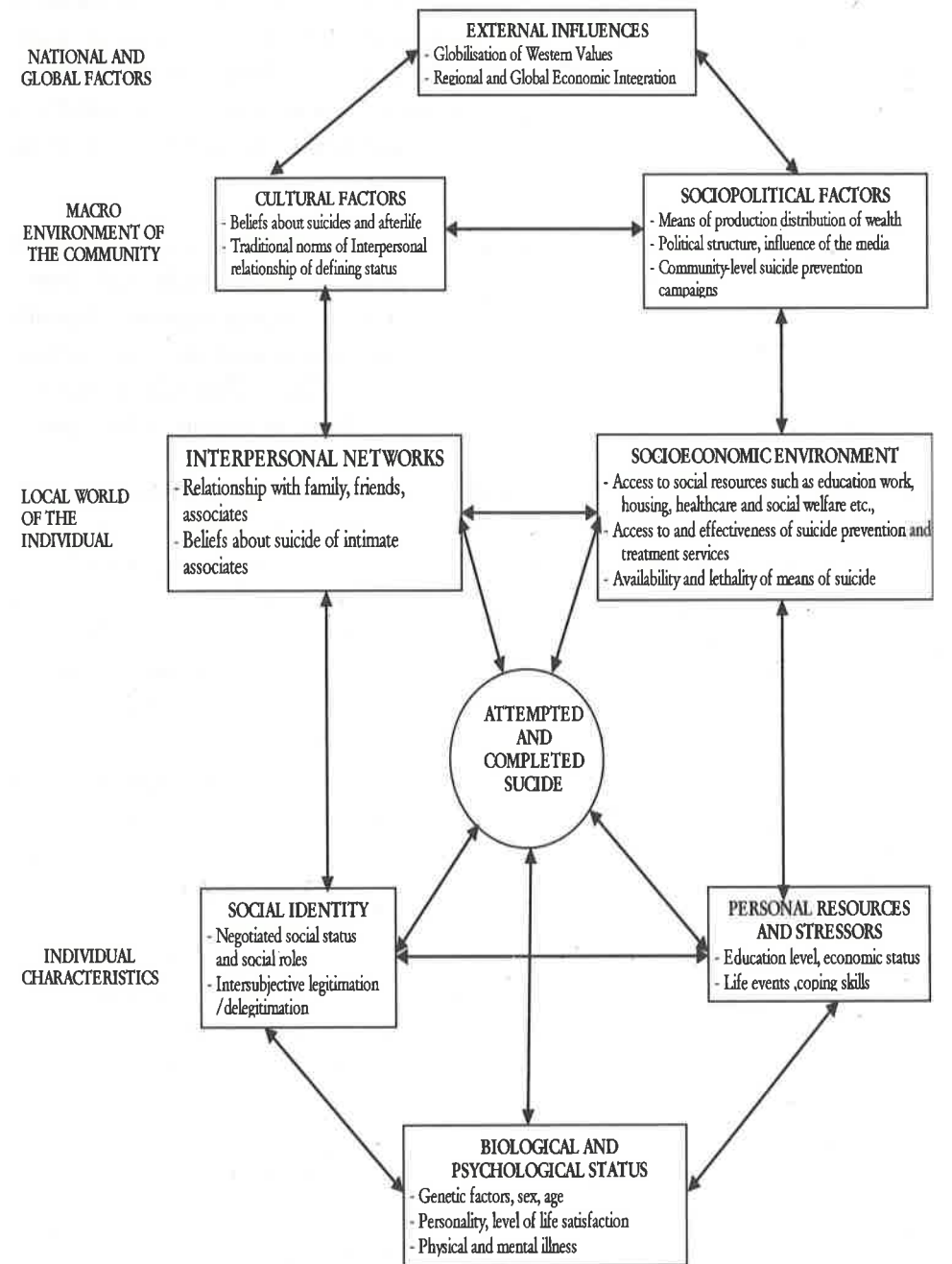
Other models too refer to the overlapping circles of predisposing and potentiating factors and what is referred to as suicidal threshold (Jacobs & Brown, 1999). While predisposing factors refer to a range of mental health problems such as affective disorders, alcoholism and severe mental illnesses like schizophrenia, potentiating factors include family history and the broad social milieu, adverse life stressors (including severe physical illnesses) and access to means of committing suicide such as firearms or pesticides. These factors could combine in idiosyncratic ways to propel individuals to and across a suicidal threshold culminating in the act of suicide.

The presence or absence of social support has been cited as a major and significant factor in the individual's decision to commit suicide. In addition to stressful and overwhelming life events or chronic severe stress, absence of social support is especially relevant in the likelihood of suicide. In times of a crisis, the suicidal person who is socially isolated often fails to make people aware of his or her suicidal ideation or plan. Thus in addition to having fewer resources to defuse a crisis, the socially isolated person is also less likely to be rescued from a suicidal crisis.

Psychologists have also been quick to emphasize that for various sub-groupings of individuals, the risk factors common in the general populations and those unique to the subgroup may both contribute to suicidal behaviour. Furthermore, though there are relationships between a variety of variables and suicide, causality may not be implied. Thus there may be within-group differences that may be often greater than between-group differences. What is being emphasized here are the difficulties in generalization about the issue of suicide and the associated risk factors for sub-groups. To give an example from the socio-economic context in Andhra Pradesh in India, the stress related to being a farmer may be formidable for some individuals, but not for others in the same sub-group. For psychologists and for those specialized in interventions, such as counselling psychologists, an awareness of both the general and unique risk factors should serve as an initial guide to gain a better understanding of suicidal behaviour at the individual level. Furthermore, risk factors in isolation are not really very useful in predicting suicidal risk. What is of crucial importance is the pattern or a clustering of signs.

Using a multi-level, multi-factorial model to explain the relationships between suicide and various influences in China, Phillips, Liu and Zhang (1999) draw attention to the inability of single-cause models that consider either socioeconomic factors or mental illness the primary cause of suicide to "allow for the possibility that these factors coexist and interact to produce suicidal behaviour" (p.43-44). They point out that in some cases, mental illness could be present without significant social stressors, while in others, these stressors may play a crucial role in the absence of diagnosable mental illness. However, the possibility of both the sets of factors coexisting in most cases of suicide is real and vital for our understanding of causative factors. As the figure below illustrates, there could be five sets of factors interacting with each other leading to the propensity to commit suicide, and collectively determining the suicide rates in a community (Figure 17).

Figure 17: Multi-Factor Model of Suicide



Source: Phillips et al, 1999

Though the authors refer to the context in China, this model could well apply to many countries in the SAARC region. According to the authors of this model, the five sets of interacting factors are cultural factors including the acceptability of 'rational suicide' as a solution for various social problems, socio-political factors that serve as major constraining circumstances, psychosocial problems such as depression and substance that restrict individuals' ability to adapt to stressful conditions; the easy availability of means of committing suicide such as pesticides; and finally, the availability of suicide prevention services.

While assessment of suicidal risk and intervention in a suicidal crisis are important components of counselling psychology, the issue of prevention has traditionally been a major site of efforts with evidence coming even from developing countries. Typically, suicide prevention efforts take various forms, including suicide crisis centres or hotlines, educational programmes, and suicide inoculation programmes. These efforts that were discussed during the seminar will be presented in a subsequent section of this report.

For psychiatrists, the presence of mental illness has occupied a premier position in the matrix of causation of suicide. Psychiatric professionals in India point out however that the relationship between depression and suicide is less evident in Asia and that although psychological/clinical factors seem similar across developed and developing countries, it is because the demographic and socio-cultural risk factors are different from developed countries that the suicide scenario in developing countries is dissimilar from developed countries. It has been pointed out that in the case of women, especially in young women in the reproductive age group, mental illness, particularly depressive disorders and socioeconomic factors are strong risk factors for both attempted and completed suicide. But it is not always clear how these factors in combination influence risk. Data from developing countries are insufficient in delineating these multi factorial pathways. Some psychiatrists are of the view that history of mental illness on the one hand and social and economic stressors on the other are not mutually exclusive, but the relative contribution of both these sets of risk factors in suicide is important for shaping population-level prevention strategies and estimating the need for psychiatric interventions. Data from community-based cohort studies reported from Goa for instance, have indicated that the presence of social and economic disadvantage factors and chronic physical illness may be stronger predictors of incident suicide attempts than the presence of common mental disorders among women in developing countries. Based on such data, it has been suggested that multi pronged suicide prevention strategies are needed that would address wide-ranging measures such as poverty-reduction, strengthening of the health system, particularly the primary health care system to identify and treat common mental disorders, and strategies aimed at combating disempowering experiences such as domestic violence.

IV

Interventions: State and Civil Society Initiatives⁶

The considerable variation observed in the methods used for suicide between the developed and developing worlds, and even within the developing countries is not an issue that has to do with individual choice and whim. The means one chooses to die reflects opportunistic considerations such as availability and cultural acceptance as well.

Pesticide poisoning constitutes the single largest category of means in countries like India, Bangladesh, and Sri Lanka. In countries like India which is witnessing large-scale commercialization of agriculture and the consequent dependency on agrochemicals makes these highly toxic pesticides easily available in rural households.

The widespread use of pesticides as a means of committing suicide in rural communities in Sri Lanka has prompted policy initiatives on pesticide access and public education on safe keeping of pesticide. An example of a policy initiative in reducing suicide rates is the case of Sri Lanka is banning of use of the most toxic pesticides, itself a fall out of the green revolution in agriculture. This is reported to have led to a dramatic reduction by half of the suicide rate. In India it has been found that the majority of suicide poisoning cases followed the consumption of what are known as class I and II pesticides (extremely and highly hazardous substances). These pesticides are banned in the developed world and in India it is only the state of Kerala that has instituted such a ban while Tamil Nadu has banned the sale of certain pesticides. Indeed, the Indian government blocked the inclusion of the neurotoxic pesticide Endosulfan to the list of regulated substances in the Rotterdam Convention in 2008. By doing so, our government stood isolated and was criticised for prioritizing the economic interests of the chemical industry over the interests of public health. Further more, studies indicate that among high-risk groups such as adolescents for whom a suicidal bid is often based on spur-of-the moment impulsive considerations, easy access to pesticides makes it a convenient choice, and combined with inadequate emergency treatment facilities, results in what could be

⁶ This section is based on presentations/papers of Anuradha Bose, Lakshmi Ratnaike, Roshni, Lakshmi Vijayakumar, Tankashala Ashok, Daya Somasundaram, P.O. George, Vikram Patel, Krishnan Gireesh, A.K. Goel, P.Purushottam, Kapil Ahmed, Jameela Nishat and Lenin Raghuvanshi and the subsequent discussions.

avoidable higher fatality rates. This is also substantiated by the results of a study on treatment seeking behaviour among those attempted suicides which shows that nearly 60 percent sought treatment in the post suicide situation. In the absence of compulsion for showing proof of need for pesticide use by the buyer regulation of sale of pesticide is not possible. Besides there is need to pass statutes to include emetic in the pesticide which will reduce the level of toxicity thereby which might help reduce the mortality due to toxic pesticide ingestion. These legal precautions along with banning of Class I and II pesticides should be taken up immediately in the interest of public health. Perhaps such demand would raise the debate on impact on agricultural production and alternatives to such pesticides.

Alternative farming practices like the non pesticide management (NPM) practices have reduced usage of chemical pesticides. Hence, both their availability as well as suicide rates have decreased, as demonstrated in the following table. This has occurred in a few pockets in Khammam district in Andhra Pradesh where such NPM practices have been in vogue for some time (Table 5).

Table 5 : Suicides in Non Pesticide Management Villages of Khammam district in Andhra Pradesh, India

Village	Year	Before NPM	After NPM
Punnukula	2001	3	-
Pullaigudem	2003	3	1
Kodipunjalavagu	2002	4	1
Devijathanda	2003	4	1

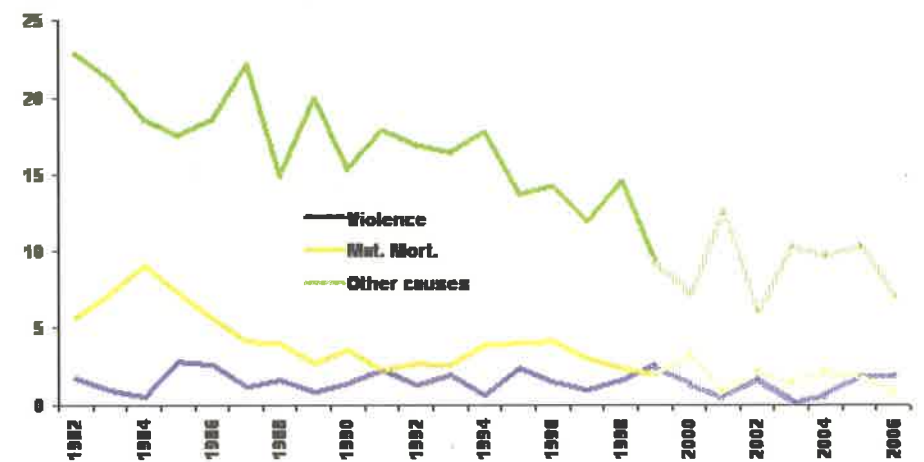
Source: Lakshmi Vijayakumar, paper presented at the seminar

The reduced rate of suicide after deliberate policy measures relating to non accessibility of a means or reduced levels of toxicity shows that to die by committing suicide may not be a killing instinct but takes place because of easy accessibility reflecting the 'hook paradox'. This also substantiates the fact that suicide in the eastern countries is more of a socio economic phenomenon unlike in western countries where the phenomenon of suicide could be attributed more to the presence of mental illness.

In societies where gender disadvantage is a strong structural factor, the impact of social capital networks such as the micro finance activities of women's self-groups in Bangladesh has been highlighted. During a 25 year period of a longitudinal population-based

demographic surveillance system study located in Matlab in Bangladesh, the death rate due to violence, defined in terms of both suicide and homicide, was found to be higher among women than men. Again among women young and not yet married women, divorced and widowed were a high risk group. The study pointed out two issues one that death rate due to suicide among women in the age group 15-44 years old was unusually high compared to other societies and two that over a long period death rate due to violence remained at the same level while death rates due to other causes declined in the same period (Figure 18).

Figure 18: Death Rate among Women of Reproductive Age in Bangladesh (per 100,000 women per year)



Source: Kapil Ahmed, paper presented at the seminar

Violation of familial decisions especially regarding marriage in the case of unmarried girls, social and economic hardships in the case of divorced and widowed women, and not having children at all or surviving children in the case of married women are some explanations for violence towards them. Another study on distress among Muslim women in old city of Hyderabad in state of Andhra Pradesh showed that harassment for dowry and physical violence rank first among all forms of domestic violence unleashed on women who committed suicide. Gender inequality being identified as the major reason for this pattern, the network of micro-finance institutions currently in operation is hypothesized as a potential medium for bonding social capital, providing a bulwark against the psychological dislocation posed by imminent suicide risk.

As several suicide researchers engaged in prevention efforts have been repeatedly emphasizing, we echo them in saying that suicide cannot be considered as a single

phenomenon. Instead, it needs to be recognized that several diverse approaches, tailored to region-specific factors, are in order. Furthermore, interventions can be categorised as systemic interventions falling into the policy/ programme realm to be taken up by the state and individual interventions usually taken up by non-governmental organizations (NGOs) and civil society.

The trends, pattern and the risk factors or the socio economic correlates of suicides and causes for suicides are closely related to the prevention and post vention strategies. As noted in the above sections there is variation in all of these in the developed and developing countries. The causal factors for suicides which range from those of proximate like the individual or psychological factors to distant factors like the social, economic, political, also highlights the need to address them while lobbying for an intervention policy towards prevention of suicide.

In the last instance, it is the frontline agencies which carry forward the prevention and post vention work among the suicide prone, suicide survivors and surviving members of suicide victims' households. Youth is one of the vulnerable groups for suicide and the causes for suicide among this group varies from love failure, family problems, academic failure, domestic violence in the case of women (Figure 12).

Often these problems get reflected in one major symptom of 'depression'. As the work of some NGOs has indicated, timely intervention in the form of 'suicide prevention hot line' during the time of announcement of examination results has reduced the rate of suicide among the students.

Highly competitive educational system breeds the not so healthy spirit of competition and pressure to perform among the children right from the pre-primary level pushing them into mental stress. This has been the ongoing general experience more so in the case of states like Kerala, and other south Indian states. It is to be noted that Kerala has a high suicide rate among children aged below 18 years. Concerted efforts between the media, NGOs like the Voluntary Health Services (VHS), the Education department, concerned citizens, parents and school teachers associations, have been fairly effective in preventing the rate of suicide among students in parts of Tamil Nadu. The lobbying of these groups with the government also resulted in introduction of the system of 'instant exams' so that students do not lose out on a year in case of failure in a minimum of 2-3 subjects. Such student friendly policy changes certainly have resulted in fall in the suicide rate among students after 2003 in the case of the state of Tamil Nadu.

The role of media both electronic and print is very important in prevention and post vention strategies. It can act as a counsellor for young adults often pushing them out of

suicide ideation. Language print media in India has often played a positive regard as it is more rooted into and well connected with the psyche of the local populations. Especially in states like Andhra Pradesh and Kerala which have a high level of corporate college education, students face extreme stress conditions to cope with studies pushing them towards suicide. Very often local press acts as 'pressure group' to sensitise authorities on conditions leading to suicide, and to respond and take up proper action.

Interventions in prevention of suicide especially among attempted suicides uncared, elderly and those suffering from burden of disease and those suffering from natural catastrophes can be in simple forms involving not much economic and human resources. A 'human touch' and an ear to listen to people's woes and a helping hand in the form of 'regular contact' also reduced suicide ideation to a considerable extent. Various NGO experiments have shown that indigenous, culturally appropriate, cost effective and deliverable interventions have definitely served to control the rate of suicide among relevant groups. For instance, the Sumithrayo Rural Suicide Prevention Programme initiated in 1996 works in 72 villages in North western and Southern provinces in Sri Lanka where suicides are very high. The rural people mostly depending on farming live in abject poverty have minimal social support systems, and alcoholism is a major problem for them. The combined effect of all these factors is manifested in feelings of frustration, humiliation, and despair leading to suicide mostly by consuming pesticide. One of the steps taken by Sumithrayo to reduce free access to pesticide is providing iron boxes to keep it under lock and key (Figure 19). This has reduced the incidence of suicide by pesticide ingestion.

Figure 19: Pesticide Storage Boxes with Double Locks in Sri Lanka



Source: Lakshmi Ratnayake, paper presented at the seminar

Maithri, a befriending centre located in Kerala works as an emotional service provider to the lonely, distressed and suicidal persons. It also maintains a hotline which is mostly used by the students and their parents (Table 6). Similar to the efforts of VHS in Chennai Maithri and other NGOs in Kerala with the help of government departments at the district level have evolved strategies to prevent suicides among students. Besides prevention postvention strategies are also designed to reach out to families with history of suicides or attempted suicides.

Table 6 : Interventions of Maithri, Kochi to Reach out to the Distressed and the Suicidal

Context	Needs addressed	Programme
Reports of high level of stress among students many schools without school counselors	Emotional problems of students unattended Growing number of child abuse cases	Trained animators to visit schools and spend time with the students individually and in groups, Training teachers to become better listeners Life skill education for students
Families under severe stress	Lack of preparation to assume parental roles	Parenting training for youngsters Reaching out to families with members with risk behaviour. Helpline for distress calls
Increasing rate of suicide among the sick, old and disabled	family's inability to look after them	Home visits by volunteers, day care programmes, Reaching out to care givers Coordinating with Pain and Palliative care centres
Lack of dependable data on suicides in the state	Scientific, methodologically appropriate research projects not attempted	Department of research and publication, establishment of a data-bank on suicides.
Media reports influencing suicidal behaviour.	Guiding on reporting suicides not being followed.	Media advocacy, sharing with media personnel accurate information and scientific interpretation of events, formulating guidelines on reporting suicides in Kerala
Many suicide prevention programmes without coordination	Methodological problems, Hidden agendas in setting up centres	Networking of suicide prevention programmes, Evolving standards in suicides in suicide prevention, taking up common programmes.

Source: P.O. George, paper presented at the seminar

Legal interventions are highly relevant for developing countries especially in the context of inadequate legal framework to cope with the suicide problem. Repeal of laws like Indian Penal Code 309 in India under which attempt to suicide is punishable offence is warranted. Lobbying by various organisations has resulted in the National Law Commission stating that IPC 309 needs to be repealed. In Sri Lanka suicide was decriminalised only in the year 2003/ 2004 and suicide rate has fallen subsequent to this act. However, other countries like Bangladesh and Pakistan also treat suicide as a criminal act and the kin have to undergo punitive and agonising legal procedures. Besides, those who make a suicide attempt and fail will also be treated as having broken the law. The view that decriminalisation of suicide will help remove stigma attached to suicide and avoid under reporting. The need to press for more accurate data on suicide was articulated in the seminar.

Methodological fallacies have found to be present in collection of suicide data as pointed by several researchers in the seminar. High rate of suicide may be because of good reporting of cause of death. For example, Kerala has a better mortality reporting system which may be one reason for the high suicide rate.

There is a need to inculcate the value for life right from childhood through educational system. The strength to take advantage from adversities has to be part of the education system. This moral responsibility can be taken up by the media. The connecting of individuals to the society through various kinds of networks need to be re worked which is largely a collective responsibility. Therefore suicide should be addressed from a larger framework as suicide is only a symptom and the larger issues are located elsewhere.

Studies have pointed to the fact that well planned policy decisions and strategies can help prevent suicide, save lives and reduce rates. Before 1960 in UK suicide by domestic gas which contained high content of Carbon Monoxide (CO) was common. After the CO content was reduced suicide by domestic gas almost disappeared with no compensatory increase in the use of other methods. Similarly it has been reported that ban of most toxic pesticides in Sri Lanka led to dramatic reduction by half of the rate of suicide. Stricter control of the availability of guns has a salutary effect on suicides by firearms, a popular method among males in the US.

Similar experiences are found in state of Kerala in India in the case of suicides by women. The decline of suicide rate among women has been due to the combined effect of several initiatives taken by the government and NGOs. Of these Kudumbashree is one important initiative which facilitated unemployed women to form into small working groups and plan for income generating livelihood activities which were financially supported by

banks. Besides, such coming together could provide women a platform for sharing personal woes and getting emotional support. The Agakhan Foundation in the Gilgit in the northern tribal areas of Pakistan where the Taliban ruled for quite a long period and the Grameen Bank of Bangladesh are examples of community initiatives that have very effectively brought rural women onto a common platform for economic needs. Studies have also shown that suicide rate among such groups is lower. Therefore the social phenomenon of women coming together facilitated by state or NGOs has certainly paid rich dividends in moderating suicide rates among them. This experience also needs to be strategized for other suicide-prone age groups and communities.

Variations in risk factor calls for different strategies for prevention of suicide. For example high risk groups like the female sex workers, married women and young adults need to be catered through health services and specific programmes. Primary care services should be strengthened for depression management and crisis interventions. However there is a pitfall that identifying psychological factors as the cause for suicide invariably leads to the prevention strategies of 'individual based psychiatric approach' for which phenomenon Kerala state in India having a high suicide rate is a case in point. Mental illness as cause for suicide stands next to family problems in Kerala. Studies argue that there is close relationship between the above mentioned phenomenon of 'medicalising suicide' and the rising market for psychiatric drugs in Kerala in recent years. The medicalising of suicide also has implications for the policy as state can shirk away its responsibility of regulation and correction in policies but simply dub as individual problem of deficiency of serotonin. In fact Kerala has been a 'test market' for a variety of consumer goods including psychiatric drugs due to the vibrant consumer culture, and a combination of multiple factors such as high literacy, high female employment, high remittances abroad, to name a few important ones.

Socio economic issues especially in the context of the neo liberal reforms play an important role in destabilising individual lives and become risk factors for suicides as noted in the above sections. Though these factors are not proximate to the incidence of suicide they need to be addressed as the probability of suicide is high among groups made vulnerable due to such factors. In fact scholars have pointed out that there is a deliberate attempt to down play socio economic factors lest there would be outcry from public for paradigm shift in public policies affecting lives of the people. In recent times neo liberal reforms have caused upheaval in the livelihood of populations depending on agriculture, handloom weaving, and other traditional industry. The Indian government also responded to suicide by farmers and weavers in the handloom and power loom segment with programmes and rehabilitation packages. There were a few policy shifts to correct distortions in the production sectors like providing free/ subsidized power supply, increase rural credit

supply in general and agricultural sector in particular, reducing burden of debt by loan waiving, rescheduling of loans, one time repayment facility, soft loan for upgrading technology, and skill development in the case of weavers. The rehabilitation package given to the households affected by suicide catered to important needs like food, housing, social security and education needs of children. As farmers and weavers have faced high level of risks both in production activity as well as individual and family levels especially in terms of health four types of insurance against such risks have been put forward as interventions. Firstly the Crop and farm income insurance; secondly weather insurance; thirdly asset insurance and lastly life and health insurance. The health insurance plan for the weavers was started from 2005-06 covered the health expenses of weaver family in both public as well as designated private hospitals. The lobbying done by NGOs working for the rights of weavers and artisans like the Bunkar Dastakar Adhikar Manch (BDAM) and Peoples' Vigilance Committee on Human Rights (PVCHR) have resulted in the government extending improved social security for the weavers in Varanasi.

Box 3

Risk-factor based strategies for suicide prevention

- Population wide-implementation of policies to counter inter-personal violence and provide debt relief to the marginalized /vulnerable
- Individual interventions for reducing inter-personal violence and treating depression
 - for high-risk groups, e.g., married women, young adults, female sex workers, delivered through health services and programmes catering to these groups (for example, school health promotion for youth, HIV prevention of female sex workers etc.)
 - strengthening primary care services for depression management and crisis interventions

Source: Vikram Patel, paper presented at the seminar

Post suicide adjustments of families have been relatively better in the farming sector in cases where the rehabilitation package was received. However studies have shown that such pre-emption and postvention policy intervention could not put an end to crisis in power loom segment in the state of Andhra Pradesh. But after October 2008 the postvention policy for power loom weavers has undergone a striking change with focus on women where women are mobilized and organized into self help groups and extended bank credit to take up micro enterprises outside power loom industry.

Preventive policy and interventions would follow a correction of policy distortion. In the case of agriculture structural factors like stress on natural resources (land and water), credit availability and access, agriculture extension in the context of changes in cropping pattern, have to be addressed especially keeping in view the need of the predominantly small and marginal sections of the peasantry. Besides, fluctuation in prices in the price domain, and cuts in tariff rates need to be addressed especially for crops playing important role in international trade. Insurance mechanisms need to be devised to address the production risks. In the case of handloom weaving industry co-operatives need to be strengthened allowing complementarities among the three types of production organisations. The protective provisions for the handloom sector need to be implemented effectively. Hence policies need to be in place addressing the production, trade related and social security issues thus protecting small and employment oriented production sectors. Interesting discussion generated around the issues of relationship between state, market and society. Gradual withdrawal of state from economic responsibilities and the role of market have become all encompassing driving towards homogeneity and universalisation and having no respect for heterogeneity. Whether there is any option left for the people for non participation in market is the moot question. The United Nations slogan 'Think globally, plan regionally and act locally' for the world suicide prevention day in September 2008 emphasises the need to plan and implement prevention programmes on mission mode. Setting up 'State Mission for Preventing Suicide' would be the first step in this direction.

Mental health services are poorly resourced and inequitable and inefficiently distributed. There is a lack of skilled mental health manpower especially in low and middle income countries. So far, the problem of suicide has not found a place in the National Health Programme of India nor was it mentioned in the first draft of the National Mental Health Plan. It is only due to extensive lobbying efforts of NGOs that suicide was ultimately included in the National Mental Health Plan in late 2008 with a budgetary allocation of almost 300 crores for suicide prevention strategies. There is no single strategy to prevent suicide. Researchers and practitioners emphasized on the need to have multi-dimensional strategies that could be categorized into *universal* strategies which looks at the entire population, regardless of the risk for suicide like for example, screening for alcoholism, or reducing access to pesticide. At another level, we have the *selective* preventive strategies for people who are at certain risk of suicides for example, people who have repeated complaints of physical problems or students facing examination stress. At the third level, there are *indicated* strategies which are specifically targeted at groups that are suicidal.

It is precisely because of the multi dimensionality of the problem of suicide that it needs multiple intervention strategies which amount to not a 'one pill-cure-all' strategy but a variety of interventions which will not only be locally relevant but also that are culturally appropriate and cost effective. The chances of reducing suicide rates lie then with the effectiveness with which these strategies are spread across biopsychosocial, environmental, and socio-cultural interventions. For instance, an example of selective strategy could be improving recognition and referral of mental disorders by crisis workers at the biopsychosocial level, prevention of domestic violence at the environmental level, and pre- and post-examination counseling for students, or training in intergenerational conflict resolution at the socio-cultural level. As several of the presenters emphasized, intersectoral strategies including policy interventions for the entire population as well as for high-risk groups are essential if we are to make any difference in stemming the rising suicide rates.

References

- Becker, G.S., & Posner, R.A. (2004). Suicide: An economic approach. Unpublished. www.pophealth.wisc.edu/PopHealth/files/file/.../810-650-029%20S08.pdf.
- Ganeshwaran, T., & Rajarajeshwaran, R. (1989). Attempted suicide in Jaffna. *Jaffna Medical Journal*.
- Ganeshwaran, T., Subramaniam, S., & Mahadevan, K. (1984). Suicide in a northern town in Sri Lanka. *Acta Psychaitrica Scandinavica*, 63, 420-425.
- Government of Andhra Pradesh (2008). Directorate of Handlooms and Textiles. Hyderabad: Government of Andhra Pradesh.
- Jacobs, D.G., & Brown, H.N. (Eds.) (1999). *The Harvard Medical School Guide to Suicide Assessment and Intervention*. San Francisco: Jossey-Bass.
- Joseph, A., Abraham, S., Muliylil, J.P., George, K., Prasad, J., Minz, S., Abraham, V.J., Jacob, K.S. (2003). Evaluation of suicide rates in rural India using verbal autopsies, 1994-9. *British Medical Journal*, 326, 1121-1122.
- Phillips, M.R., Liu, H., & Zhang, Y. (1999). Suicide and social change in China. *Culture, Medicine and Psychiatry*, 23, 1, 25-50.
- Ratnayeke L. (1998). Suicide in Sri Lanka. In R.J. Kosky et al (Eds.), *Suicide Prevention: The Global Context*. New York: Plenum.
- Stillion, J.M., McDowell, E. E., & May J. H. (1989). *Suicide across the Life Span: Premature Exits*. New York: Hemisphere.
- World Health Organization (2002). *The World Health Report 2002: Reducing Risks, Promoting Healthy Life*. Geneva: WHO.
- World Health Organization (2008). *World Health Statistics*. Geneva: WHO.

Appendix 1

List of Authors and Papers

S.No	Author	Title of the Paper
1	S. Galab, U.Vindhya & E.Revathi	Suicides in SAARC countries: Mapping of the terrain
2	Lakshmi Vijayakumar	Suicide and suicide prevention in India
3	Daya Somasundaram	Psychological aspects of suicide in the region
4	P. Radha Krishnan	Social context of rise in suicide
5	D.Narsimha Reddy	Economists' perspectives on suicide
6	B.D.Lahoti	Philosophical reflections on the problem of suicide and murder
7	K.Srinivasulu	Regime politics and rural crisis: Contextualizing suicides in rural Andhra Pradesh
8	Srijit Mishra	Farmers' suicide in India: Some trends and patterns
9	Lenin Raghuvanshi	Suicides and malnutrition among weavers in Varanasi
10	S.Galab, E.Revathi, P.Prudhvikar Reddy and P.Dharma Raju	Distress and suicides among weavers in Andhra Pradesh
11	Rama Melkote and M.Kodandaram	Starvation deaths in rural Andhra Pradesh
12	P.Purushottam	The Sircilla weaver suicides: How did the women respond?
13	Vikram Patel	The social determinants of suicidal behaviour: Lessons from Goa
14	Anuradha Bose	Suicides among youth and elderly: Focusing on pesticides
15	Daya Somasundaram	Suicide in times of civil conflict: Case study of North Lanka
16	Riaz Hassan (presented in absentia)	Suicide Attacks in Afghanistan
17	P.O. George	Socio-cultural factors influencing suicidal behaviour, with special reference to Kerala

- | | | |
|----|--------------------------------|--|
| 18 | Kapil Ahmed | Violent deaths among women in reproductive age in rural Bangladesh |
| 19 | E.Revathi, S.Galab and S.Lydia | Farm women in post suicide situation in Andhra Pradesh |
| 20 | A.H.M.Zehadul Karim | Suicide among women in Bangladesh: An Anthropological investigation at the empirical level |
| 21 | Jameela Nishat | Distress among old city women of Hyderabad |
| 22 | Lakshmi Ratnayeke | Crisis intervention and suicide prevention in rural communities in Sri Lanka (Grass-root level experience) |
| 23 | Krishnan Gireesh | Bias in the design of intervention: A challenge to suicide prevention in India |
| 24 | Ashok Tankashala | Media and suicides |
| 25 | Akheel Siddiqui | Suicides across the life span: Elderly and youth |

Discussants and Chairpersons

- | | |
|----|-------------------|
| 1 | R.Radha Krishna |
| 2 | Manoj Panda |
| 3 | A.K.Goel |
| 4 | G.Haragopal |
| 5 | G.N.Rao |
| 6 | Rama Melkote |
| 7 | K.C.Suri |
| 8. | P. Radha Krishnan |
-

Appendix 2

Concept note prepared for the International Seminar

on

Suicide in SAARC Countries: Multidisciplinary Perspectives and Evidence

There is perhaps no more timely yet enigmatic and complex topic than that of suicide in social science literature as well as in fields such as psychiatry. Self-induced deaths in some form or another have probably occurred almost as long as human beings have been in existence. The current research and policy interest in suicides however, is generated by not only the rapidly rising suicide rates worldwide, but is located in the context of processes of social change that may be viewed as causal agents of suicidal behaviour. From a social science perspective, the roots of suicide are located within the structure of society – its economic, familial, religious fabric and its cultural beliefs and world views. Socio-economic forces (e.g., agrarian crisis, unemployment, academic competition, or marital strife/divorce) may result in or be correlated with psychological states at the individual level (e.g., depression, hopelessness) that increase suicide risk. In this sense, the societal (represented by disciplines like economics and sociology) and the individual approaches (as in psychology and psychiatry) are not mutually exclusive.

More than a century ago, the paradigmatic work of the French sociologist, Durkheim showed that the modernization processes of industrialization, urbanization, and secularization have a bearing on society's level of *social integration* (the degree to which people are bound together in social networks) and the level of *social regulation* (the degree to which individuals' desires and emotions are regulated by societal norms and customs). He hypothesized that a drastic calibration in either direction of the two scales of integration and regulation is likely to contribute to the increased prevalence of suicide.

Since then, some of the identified socio-economic influences range from factors such as intensity of economic strain, demographic and temporal forces, the vitality of marriage and family life, religion, migration, to what are described as "copy cat" suicides or imitative actions that may be generated by media coverage of suicides. Yet other risk factors are as wide-ranging as opportunity considerations such as firearm availability, to those associated with alcohol consumption, occupation, work mobility, and to political factors such as war and ethnic conflict.

Recent data indicate that while the largest numbers of suicides (absolute) are found in Asia, almost thirty per cent of all cases of suicide world wide are committed in China and India alone (World Health Organization, 2008). Furthermore, since the last two decades or so, the SAARC countries in particular have undergone large scale changes such as economic reforms, unleashing in their wake, massive social and economic restructuring, and political destabilization due to internal strife and external factors. While a wide array of correlates to suicidal behaviour are to be found in these socio-economic forces, we are yet to have a comprehensive understanding regarding how they are interrelated and how they coalesce at the individual level. Multidisciplinary perspectives and cross country comparisons therefore, can provide additive, and not competing explanations in facilitating a rigorous analysis of all the three aspects of prediction, prevention and postvention related to suicide.

The Centre for Economic and Social Studies has already initiated research on suicide with some studies on suicides among farmers and among handloom weavers. Broadening the scope now, this seminar is conceived as a further step in the direction of bringing together perspectives from different disciplines to enable a comprehensive understanding of the heterogeneity of the suicidal experience in the SAARC countries in particular.

Specific objectives of the Seminar

1. To obtain multi disciplinary perspectives for comprehensive understanding of the predictors of suicide across different population groups
2. To explore the role and impact of public policy for prevention and postvention on suicides in SAARC countries
3. To document the civil society initiatives including that of NGOs in prevention and postvention issues
4. To establish an interface among researchers, civil society organisations and policy makers

Thematic sessions in the Seminar

1. Multidisciplinary perspectives on suicide
2. Occupational groups and suicides
3. Predictors, prevention and policy measures
4. Socio-political destabilization of society and suicides
5. Gender relations and suicides
6. Civil society initiatives in suicide prevention

Current Monographs	No
A State in Periodic Crises - Andhra Pradesh <i>BPR Vithal, March 2010</i>	11
Bauxite Mining in Eastern Ghats: <i>Mapping the Livelihoods of Affected Communities (RULNR Mpnograph- 3)</i> <i>Prajna Paramita Mishra and M. Gopinath Reddy, March 2010</i>	10
Payments for Environmental Services (PES) <i>A Review of Experiences across Countries (RULNR Mpnograph- 2)</i> <i>Bhagirath Behera, Pulak Mishra, Narayan C. Nayak and V. Ratn Reddy</i> <i>March 2010</i>	9
Assessment of Economic and Ecological Returns from Millet-based Bio-diverse Organic Farms vis-à-vis Conventional Farms (RULNR Monograph- 1) <i>B. Suresh Reddy, January 2010</i>	8
Enhancing Growth and Productive Employment Linkages in the Food Processing Sector <i>N. Chandrasekhara Rao, September 2008</i>	7
Governance Issues and Livelihood Impact Of Community Forest Management: (A Study of Selected Districts in Andhra Pradesh) <i>V. Ratna Reddy, M. Gopinath Reddy, V.M. Ravi Kumar and M. Srinivasa Reddy</i> <i>May 2008</i>	6
Maintaining a Viable Small Scale Fishery: <i>A Study of Trawler Sector in the Palk Bay</i> <i>Jyothis Sathyapalan, Jeena T Srinivasan and Joeri Scholtens, March 2008</i>	5
Right to Development and Poverty Reduction Strategy <i>A Case Study of Andhra Pradesh</i> <i>S. Mahendra Dev, S. Galab and P. Prudhvikar Reddy, December 2007</i>	4
Socioeconomic Impact of Bt Cotton <i>S. Mahendra Dev and N. Chandrasekhara Rao, November 2007</i>	3
Formalising Irrigation Institutions: A Study of Water User Associations in Andhra Pradesh <i>V. Ratna Reddy, P. Prudhvikar Reddy and U. Hemantha Kumar, July 2007</i>	2



Centre for Economic and Social Studies

Nizamiah Observatory Campus, Begumpet, Hyderabad - 500 016

Ph: 040-23416610-13, 23402789, 23416780, Fax : 040-23406808

e-mail : postmaster@cess.ac.in, web : www.cess.ac.in, www.rulnr.ac.in