

Annual Report 2005-2006

Preface

2005-06 was an eventful year for the **Centre for Environment and Food Security (CEFS)** for many reasons. The overwhelming response to all our research and advocacy programmes carried out during 2005-2006 exceeded all our expectations.

First and foremost, CEFS completed and released its first research report titled “**Political Economy of Hunger & Poverty in Adivasi (tribal) Areas of India**”. The report was formally released on 14th October 2005 at India International Centre, New Delhi by eminent social scientist Prof. Ashis Nandy. The report has been very well received by media, ministries, departments and agencies of the Union Government and State Governments as well as by Academia, NGOs, CBOs and public at large.

Second, the **Freedom from Hunger Campaign** launched on 10th February 2005 at India International Centre, New Delhi to make India a 'Hunger-Free country' acquired momentum during 2005-06. In a very short period with tiny budget and small infrastructure, the Freedom from Hunger Campaign has been able to draw the attention of Indian Parliament and various ministries and agencies of the Government. In May 2005, some members of Rajya Sabha (Upper House of Parliament) asked questions about CEFS and its Freedom from Hunger Campaign. On 6th May 2005, Mr. Sharad Pawar, Union Minister for Agriculture, Consumer Affairs, Food and Public Distribution gave written answers to all these questions on the floor of Rajya Sabha.

Since February 2005, CEFS in collaboration with India International Centre (New Delhi) is hosting a bimonthly **Freedom from Hunger Lecture Series** and this lecture series will continue till 15th August, 2007. The second Freedom from Hunger Lecture was delivered by Prof. Utsa Patnaik on 12th April 2005, third lecture was delivered by Dr. Kirit Parikh on 10th June 2005, fourth by Dr Vandana Shiva on 10th August 2005, fifth by Prof

C Douglas Lummis on 14th October 2005, sixth by Prof Jayati Ghosh on December 9th 2005, seventh by Dr Ashok Khosla on 20th January 2006 and the eighth lecture in this series was delivered by Dr Devinder Sharma on 17th March 2006.

We plan to publish all the lectures delivered in this series in two volumes. This lecture series has become a popular intellectual event of the Capital and is attended by a large number of activists, scientists, intellectuals, government officials, policy makers, farmers' leaders and members of diplomatic missions and various international agencies.

There are a number of programmes and activities to be carried out during the first phase of Campaign. But we have decided to focus mainly on two issues during the first phase. The first issue we are going to focus on is - Livelihood crises and hunger in Adivasi areas of India. The second issue we would focus on is - Agrarian distress and farmers' suicides : Its implications for India's sustainable food security.

More than 65 per cent of India's population still depends on natural resources for their livelihood. Any economic process that undermines the health and sustainability of natural resources is bound to undermine the livelihoods of over 65 per cent of our population. Unlike Western societies where "Environment" is limited to trees and tigers, wildlife sanctuaries and eco-tourism, environment for a developing country like India is a by-name for lives and livelihoods. Environment is lifeline and, therefore, economic growth at the cost of destruction of ecological wealth would be only suicidal. No wonder that large number of farmers in India are committing suicide. For a healthy and sustainable economic growth, the protection of natural resources must be in-built. Unfortunately, the prevalent economic growth models are skewed and often ecologically disruptive.

Realizing the importance of discourse on interface between economic growth and ecological security, CEFS in collaboration with India Habitat Centre (New Delhi) initiated a public debate on -"Can Economic growth and Ecological Security go together?" As

part of this debate series, the first public debate on the topic was held at India Habitat Centre on 10th January 2005. The panel of lead debators included distinguished environmentalist Dr Vandana Shiva and noted economists Dr Ashok Desai, Dr Prem Shankar Jha and Prof Shubhashis Gangopadhyay. This inaugural debate was moderated by eminent social scientist Prof. Ashis Nandy. The second debate in this series was held on 4th March 2005. Eminent environmentalist Dr. Ashok Khosla (President, Development Alternatives) and distinguished economists Dr. Surjit S. Bhalla (President, Oxus Investments) and Prof. Amitabh Kundu (JNU) participated in this debate as lead debators. Prof. N S Ramaswamy, founder director, IIM-Bangalore chaired and moderated this debate .

Third Public Debate was held on 20th May 2005. Prof. P. S. Ramakrishnan, Prof. Kanchan Chopra, Dr. Devinder Sharma and Prof. Suresh Sharma spoke as lead debators. Fourth Debate was held on 20th July, 2005. Prof. B. B. Bhattacharya (VC, JNU), Dr. R. K. Pachauri (DG-TERI and Chairperson-IPCC), Prof. C Douglas Lummis (distinguished Political Scientist & Writer) and Dr. Shekhar Singh (noted environmentalist) participated as lead debators. Fifth and final Debate on Economic Growth Vs. Ecological Security was held on 5th September, 2005 at India Habitat Centre. Mr. Gurcharan Das, World-reknowned Management Guru, author and Columnist, Mr Ramaswamy R. Iyer, Honorary Research Professor, Centre for Policy Research and former Union Secretary, Water Resources, Dr. Suman Sahai, President, Gene Campaign and Prof. Smitu Kothari, noted environmental activist and Visiting Professor, Princeton University participated as lead debators in the same. Parshuram Ray moderated & chaired this debate .

In the years ahead, we would strive to redefine activism and transform the contours of development discourse and ecological politics in India. We firmly believe that poverty is the worst form of violence and food is god to the hungry.

Parshuram Rai

New Delhi

Introduction of Centre for Environment and Food Security

The Centre for Environment and Food Security (CEFS) was founded in April, 2001 by some eminent scholars, writers, environmentalists, scientists and activists like Prof. Ashis Nandy, Dr. Kamla Chowdhry, Dr. Pradipto Roy, Mr. Anupam Mishra, Prof. P. S. Ramakrishnan, Dr. T.N. Khoshoo, Mr. P.N. Singh and Mr. Parshuram Ray. CEFS was founded with the broad objective of knowledge-based activism on the issues of poverty, hunger, food security, sustainable livelihoods, sustainable development and ecological security. Research, Advocacy and Campaign on these issues is the core mandate of this NGO based in New Delhi. Parshuram Ray is the Founder Director of CEFS.

The main aims and objectives of the Centre for Environment and Food Security include:

- ? To promote study and research on environment and food security to create awareness and knowledge among the people.
- ? To disseminate environment and food security knowledge among the people by conducting training programs and holding lectures, workshops and seminars.
- ? To implement and encourage all kinds of projects, plans and programs for promoting ecological balance and food security.
- ? To build a resource centre on environment, food security and sustainable livelihoods.
- ? To mobilize people and build a network of grassroot organizations, civil society groups, NGOs, activists and experts for promoting sustainable development and food security.
- ? To publish books, research papers, monographs and occasional papers on environment and food security related issues.
- ? To carry out intensive campaign with media for covering and highlighting the issues of environment and food security.
- ? To promote strategies for conservation of natural and human-managed biodiversity, which have implications for food and human security for all sections of the society, especially societies living close to nature and natural resources.

Introduction of CEFS Founders and Board Members

1. **Prof. Ashis Nandy** is presently Senior Fellow of the Centre for the Study of Developing Societies and Chairperson of the Committee for Cultural Choices and Global Futures, both in Delhi. He has been Director of the Centre for the Study of Developing Societies (1992-1997); Woodrow Wilson Fellow, Woodrow Wilson International Center, Washington (1988); Charles Wallace Fellow, Department of Politics, University of Hull (Summer, 1990); Fellow, Institute for Advanced Studies in Humanities, University of Edinburgh (Summer, 1991); UNESCO Professor, Centre for European Studies, University of Trier, Germany (Summer, 1994); and Regent's Fellow, University of California, Los Angeles. Trained as a sociologist and clinical psychologist, Nandy's research interests are political psychology, cultures of knowledge, utopias and visions, popular culture, and futures. Among Nandy's books are *Alternative Sciences* (1980,1995); *At the Edge of Psychology* (1980); *The Intimate Enemy* (1983); *Traditions, Tyranny and Utopias* (1987); *The Tao of Cricket* (1989); *The Illegitimacy of Nationalism* (1994); and *The Savage Freud and Other Essays in Possible and Retrievable Selves* (1995). He is also co-author of *The Blinded Eye* (1993) also published as *Barbaric Others*, and *Creating a Nationality* (1995). Nandy has edited two books, (ed), *Science, Hegemony and Violence* (1988); and *The Secret Politics of our Desires*; and co-edited *The Multiverse of Democracy* (1996). Oxford University Press is now bringing out an omnibus edition of all his works. Nandy's works have been translated into a number of languages, among them Bengali, Chinese, Finnish, French, German, Hindi, Italian, Japanese, Malayalam, Marathi, Polish, Russian, Spanish and Tamil. He has also contributed to major human rights reports on ethnic and communal violence and democratic elections.

2. **Dr. Prodipto Roy** has an M.Sc and Ph.D. in Rural Sociology with a minor in Agricultural Economics from the Pennsylvania State University, USA and a B.Sc. in Agriculture from the Agricultural Institute of Allahabad University. He started his professional career as an Assistant Professor of sociology, Washington State University, (1957-61); Director (Sociology) National Institute of Rural Development, Hyderabad

(1961-68); Director and Executive Chairperson, Council for Social Development, New Delhi(1968-1979); Visiting Professor, Tribhuvan University(1979-81) and then Sociologist, International Centre for Integrated Mountain Development (ICIMOD), Kathmandu (1984-89). Important Assignments: UN Centre for Regional Development, Nagoya, Japan 1974; ILO Bangladesh 1975; UN Asian and Pacific Development Centre, Kuala Lumpur, Malaysia(1981); IBRD Consultant (1982-83); Australian AID project on R & R of project affected people due to Coal-mining, Jharkhand, 1994-98; appraisal of a Tree-growing programme, Palamu, Jharkhand (1998-2000). Publications: *Manual for Block Level Planning* NIRD, Hyderabad, Macmillan, Delhi, 1977 with BR Patil; *Planning with People: Decentralization in Nepal*, with Sant B Gurung, Orient Longmans, New Delhi 1987; *Third World Surveys: Survey Research Methods in Developing Nations*, New Delhi, Macmillan 1976; *Ecological Responsibility in Social Change*, Vol 31 Nos 1 & 2, 2001.

3. **Prof. P.S. Ramakrishnan**, Professor Emeritus of Ecology at Jawaharlal Nehru University, is an internationally recognized ecologist working in the interphase areas of linking ecological processes with social processes, directed towards sustainable livelihood/development of traditional societies. For his work, involving over 350 research publications and 8 books in this area of study, he has received a variety of national and international recognitions. He is currently involved in networking with a large number of scientists through many national and international programmes.

4. **Dr. T.N. Khoshoo**, was (expired in July 2002) one of the foremost environmental scientists of the country. His environmental canvas widened considerably when he was secretary to the govt. of India in the dept. of Environment. He was fellow of all the major science academies in country, and had to his credit a number of prestigious medals, prizes and awards including the Padma Bhushan, Indira Gandhi Paryavaran Puraskar, Government of India (1993) and Sasakawa Award of the United Nations Environment Programme (UNEP-2002).

5. **Dr. Kamla Chowdhary**, was (expired in February 2006) Chairperson of the National Wasteland Development Board, Govt. of India, Director of the Indian Institute of Management (IIM), Ahmedabad and, Chairperson of the Centre for Science and Environment. She was at the faculty of Harvard University and had worked with the World Bank and Ford Foundation too.

6. **Shri Anupam Mishra**, currently General Secretary of the Gandhi Peace Foundation, is a distinguished social and environmental activist of India. Mishra's contribution in popularizing and reinventing the role of traditional Water Harvesting Practices of India has earned him a special name in the country. He is author of the celebrated book on traditional tanks of India titled *Aaj Bhi Khare Hai Talab (Tanks are still alive)* which has been translated in many languages and the print - run of the original Hindi version is a record 75,000 copies till now.

7. **Shri B. P. Singh** is a distinguished scholar and civil servant. Over the past 40 years he has held a variety of important positions within Assam as well as in the Government of India including Additional Secretary, Ministry of Environment & Forests (1993-95), Culture Secretary (1995-97) and Home Secretary (1997-99). He was Executive Director and Ambassador at the World Bank (1999-2002) representing India, Bhutan, Bangladesh and Sri Lanka. B.P. Singh has authored four books including the two widely acclaimed ones: "The Problem of Change: A Study of North-East India" and "India's Culture – the State, the Arts and Beyond" both published by Oxford University Press, New Delhi. He is also Chief Editor of the "Millennium Book on New Delhi" published by Oxford University Press, New Delhi in 2001. Currently, B.P. Singh is Chancellor of the Central Institute of Higher Tibetan Studies, Sarnath (a Deemed University). He is also Chief Editor of the South Asia Series on "Perspectives on Economics, Technology and Governance" of Oxford University Press, New York.

Programmes and Projects Implemented during 2005-2006

Research and Advocacy Project on the Political Economy of Hunger in Adivasis Areas of Rajasthan and Jharkhand

Since November 2003, CEFS was doing survey research on the issue of hunger in tribal areas of Rajasthan and Jharkhand. This project was an effort to bring the issue of hunger & food insecurity in Adivasi areas in the forefront of intellectual discourse and policy planning. This research report was formally released by Prof Ashis Nandy on 14th October 2005 at India International Centre, New Delhi. The full copy of this report has been posted on CEFS website (www.cefsindia.org). This research report has been widely circulated and it has attracted extensive media coverage. Besides the state governments of Rajasthan and Jharkhand, many Union ministries and government agencies too have taken note of this survey report.

Executive summary of survey research on hunger & poverty in Adivasi areas of Rajasthan and Jharkhand

The findings of the survey research on hunger in Adivasi areas of Rajasthan and Jharkhand carried out by **Centre for Environment and Food Security (CEFS)** are revealing but shocking. It is distressful to note that out of total 1000 Adivasi households from 40 sample villages in Rajasthan and Jharkhand surveyed for this study, a staggering 99 per cent were facing chronic hunger. The data gathered during this survey suggests that 25.2 percent of surveyed Adivasi households had faced semi-starvation during the previous week of the survey. The survey data also suggests that 24.1 percent of the sample Adivasi households had lived in semi-starvation condition throughout the previous month of the survey. Over 99 per cent of the Adivasi households had lived with one or another level of endemic hunger and food insecurity during the whole previous year. Moreover, out of 500 sample Adivasi households

surveyed in Rajasthan, not a single had secured two square meals throughout the previous year.

Sample Size and Methodology

The Field survey for this research was carried out during March-June 2004 in forty Adivasi villages of four Adivasi-dominated districts, two each from Rajasthan and Jharkhand. Udaipur & Dungarpur districts of Rajasthan, and West Singhbhum & Gumla districts from Jharkhand were purposively selected for a household survey among 1000 Adivasi households. From every sample district 10 sample Adivasi villages and from every sample village 25 Adivasi households were purposively selected for the household survey. The total sample size of Adivasi households was 1000, 500 samples each from Rajasthan and Jharkhand. Only villages with over 75 per cent of Adivasi population were selected for sample survey. In the selection of household samples, only one category of households were excluded, i.e.- those with regular salaried income.

Socio-economic profile of sample Adivasi households

Out of the total sample size of 1000 Adivasi households, 60.1 per cent of respondents were male and 39.9 per cent female, 68.75 percent of respondents were illiterate, 95.1 per cent lived in thatched and mud houses, 96.4 per cent were without electricity, 84.7 per cent without water availability within 1000 meters of their house, 99.7 per cent were without toilet and a horrifying 99 per cent of Adivasis were facing chronic hunger. **On the basis of these socio-economic indicators, it would be only logical to conclude that these Adivasis are living in appalling conditions, grinding poverty and their depth of deprivation defies all imaginations of a deprived human life.**

Household Assets

To get an elementary assessment of the level of poverty and deprivation among sample Adivasi households in Rajasthan and Jharkhand, they were asked as to how many of ten listed household assets (1.Blanket, 2.Pair of shoes, 3.Bicycle, 4.cooker, 5.Kerosene

stove, 6. Radio, 7. T.V, 8. Torch, 9. Clock/Watch, 10. Others) were available in their homes. We were shocked to find that 10.4 per cent of Adivasi households did not have any of these listed items in their homes. Moreover, there was not even a single Adivasi household from the 1000 samples which possessed more than 4 household assets from this list. 32.2 per cent of samples possessed blanket and pair of shoes. While 44 per cent of households from Rajasthan possessed blanket and a pair of shoes, only 20.4 per cent of Jharkhand samples possessed these two items. Only 8.8 per cent of the samples were in possession of 4 items from the given list. Proportion of samples possessing any 4 listed household assets was only 4 per cent in Rajasthan and 13.6 per cent in Jharkhand.

Daily hunger Profile

Among the total 1000 households asked as to whether they had eaten two square meals on the previous day of the survey, only four respondents (0.4 per cent), two each from Rajasthan & Jharkhand said that they had eaten two square meals on the previous day. When they were asked whether they could get one square meal plus one poor/partial meal on the previous day, only five households (0.5 per cent) replied yes. Out of the remaining households, 47.9 per cent had eaten two poor/partial meals, 34.7 per cent got one poor/partial meal plus one distress meal, 11.3 per cent could get just one poor/partial meal, 0.2 per cent had eaten only one distress meal and 5 per cent of the surveyed Adivasis could eat only jungle food on the previous day of the survey.

This data suggests that at least 16.5 percent of the surveyed Adivasi households had eaten either just one poor/partial meal or one distress meal or only jungle food on the previous day of the survey. In other words, at least 16.5 per cent of sample Adivasi households were facing either starvation or semi-starvation on the previous day of the survey. While only nine families (1.8 per cent) in Rajasthan had survived on Jungle food, 41 Adivasi households (8.2 per cent) in Jharkhand had to make do with only jungle food on the previous day of the survey.

Proportion of Jungle food in total food intake on previous day

62.4 per cent of sample Adivasi households said that the proportion of jungle food in their previous day's diet was zero, 16.9 per cent samples said that one-fourth of their diet on the previous day consisted of jungle food, 9.9 per cent families said that half of their diet on the previous day consisted of jungle food, 5.8 per cent said that it was three-fourth and 5 per cent Adivasi households said that their full diet on the previous day consisted of only Jungle food. This data again reinforces the previous finding that 5 per cent of Adivasis had eaten nothing but jungle food on the previous day of survey. The use, access and availability of jungle food and Minor Forest Produce (MFP) in Jharkhand (especially in West Singhbhum district) is very high in comparison to that in Rajasthan. In the West Singhbhum district of Jharkhand, MFP is still a major source of livelihood for many Adivasi households.

Protein (Pulses & animal products) eaten on previous day

An alarming proportion of 76.6 per cent Adivasi households said that they could not afford any pulse or animal product on the previous day of the survey. Only 23.4 per cent of the samples had eaten some pulses or animal products on the previous day. While 112 (22.4 per cent) samples from Rajasthan had eaten some pulses or animal products, 122 (24.4 per cent) samples from Jharkhand were able to secure some pulses or animal products on the previous day. While 388 (77.6 per cent) samples from Rajasthan could not afford any pulse or animal product on the previous day of survey, the corresponding figure for Jharkhand was 378 (75.6 per cent).

Weekly Hunger Profile

To assess and ascertain the weekly state of hunger and food insecurity among Adivasi households, they were asked as to what category of food was secured by them for how many days of the previous week. When they were asked as to whether they had eaten two square meals on all 7 days of the previous week, only one respondent (0.01 per cent) replied yes. The remaining 999 (99.9 per cent) households said that they could not get two square meals even on a single day of the previous week. When asked as to how many of them for how many days of the previous week could secure one square

meal plus one poor/partial meal, 98.9 percent said that they could not afford this kind of food even for a single day of the previous week. This weekly data on hunger again confirms that about 99 per cent of Adivasi households in Rajasthan and Jharkhand were facing chronic hunger.

Only 216 (21.6 percent) out of 1000 surveyed households were able to secure even two poor/partial meals on all seven days of the previous week. 57 sample families (5.7 per cent) had secured two poor/partial meals for 6 days of the previous week, 103 families (10.3 per cent) for 5 days of the week, 70 families (7 per cent) for 4 days, 59 families (5.9 per cent) for 3 days, 62 families (6.2 per cent) for only 2 days of the week and 18 sample families (1.8 per cent) for just 1 day of the previous week.

Another 214 (21.4 percent) of the households had survived throughout the week on just one poor/partial meal plus one distress meal per day. 99 sample Adivasi households (9.9 per cent) had eaten one poor/partial meal plus one distress meal for 5 days of the previous week, 66 families (6.6 per cent) for four days of the week, 76 households (7.6 per cent) for 3 days of the week, 112 families (11.2 per cent) for 2 days and 71 families (7.1 per cent) for only one day of the previous week.

2.8 percent of the households had survived by eating just one poor/partial meal a day throughout the previous week. 30 sample families (3 per cent) had eaten just one poor/partial meal for 5 days of the previous week, 40 samples (4 per cent) for four days, 58 families (5.8 per cent) for 3 days and 96 families (9.6 per cent) for 2 days of the week. This data suggests that 25.2 percent of surveyed Adivasi households in Rajasthan and Jharkhand had eaten only one poor/partial meal for 2-7 days of the previous week.

Ten Adivasi households (1 percent) could barely secure one distress meal a day throughout the previous week. Another three families had eaten only distress food for 6 days of the week, 7 families for 3 days and 11 families for 2 days of the previous week. This data suggests that 31 (3.1 per cent) Adivasi families had eaten either for the whole previous week or for a significant part of it only one distress meal-a-day.

The survey data on weekly hunger clearly suggests that 28.3 per cent of sample Adivasi households had survived for the whole or significant part of the previous week by eating just one distress meal-a-day or one poor/ partial meal- a- day. In other words, 28.3 per cent of sample households had lived in semi-starvation condition during the previous week of survey.

Jungle food consumption during previous week

Among the total sample Adivasi households, 62 per cent said that they did not eat any jungle food during the previous week of survey, 15.2 per cent said that approximately one-fourth of their diet consisted of jungle food during previous one week, 8.2 per cent samples said that half of their diet during the week consisted of jungle food,6.7 per cent said that it was up to three-fourth and 7.9 per cent samples said that 75-100 per cent of their previous week's diet consisted of jungle food only.

Protein (pulses & animal products) consumption during previous week

40.2 per cent of sample Adivasi households could not afford any pulse or animal product even for a single day of the previous week. 20.8 per cent samples could afford these items for just one day of the week, 22 per cent for 2 days in the week, 8.3 per cent for 3 days, 4.6 per cent for 4 days, 2.1 per cent for 5 days, 0.4 per cent for 6 days and only 1.6 per cent of samples had eaten some source of protein on all 7 days of the previous week.

Monthly Hunger Profile

998 households (99.8 per cent) said that they could not secure two square meals even for a single day of the previous month. Out of the remaining two households, one had got two square meals on just one day of the previous month and only one household (0.01 per cent) had taken two square meals-a-day throughout the month. Not a single of the 500 households surveyed in Rajasthan had eaten two square meals even on a single day of the previous month. When asked as to how many of them for how many days of the previous month could afford one square meal plus one poor/partial meal- a-

day, the answer was no less shocking. A staggering 98.4 per cent of the households said that they could not secure for a single day of the previous month even this kind of food. The data on monthly hunger profile suggests that since only one family had secured two square meals and another two families had secured one square meal plus one poor/partial meal for the full month, the remaining 997 Adivasi households (99.7 percent) were facing chronic hunger during the previous month of the survey.

When asked as for how many days of the previous month they had secured two poor/partial meals - a - day, 36 per cent said that they could not get this kind of food even for a single day of the previous month and only 15.2 per cent said that they had eaten this kind of food for the whole month. 13.7 per cent of the sample households had eaten this category of food for 25-30 days, 11.3 per cent for 20-25 days, 7.4 per cent for 15-20 days, 11.4 per cent for 10-15 days and 3 per cent of households had eaten this kind of food for 5 days of the previous month.

When asked as for how many days of the previous month they had eaten one poor/partial meal plus one distress meal - a - day, 14.5 per cent of total samples said that for the whole month they had eaten only this kind of food, 11.8 per cent for 10-15 days of the month, 10.9 per cent for 15-20 days, 14 per cent had eaten for 20-25 days and 3.6 per cent for 25-30 days of the previous month. While 12.4 per cent Adivasi households from Rajasthan had eaten only this category of food on all days of the previous month, 16.6 per cent samples from Jharkhand had eaten this kind of food on all days of the previous month. 5 per cent of samples from Rajasthan had eaten this kind of food for 25-30 days, 11.2 per cent for 20-25 days, 10.6 per cent for 15-20 days and 11.2 per cent for 10-15 days. The respective figures for Jharkhand are 2.2 per cent, 16.8 per cent, 11.2 per cent and 12.4 per cent

When asked as for how many days of the previous month they had survived only on one poor/partial meal, 1.9 per cent among total samples said that for the whole previous month they could secure only this kind of food, 1.1 per cent for 25-30 days of the month, 3.2 per cent for 20-25 days of the month, 3.9 per cent for 15-20 days of the month

and 14 per cent of the Adivasi households had survived on this kind of food for 10-15 days of the previous month. This data suggests that 24.1 percent of the surveyed Adivasi households had eaten only one poor/ partial meal-a-day for 10-30 days of the previous month.

Two Adivasi households among total samples had survived the full previous month by eating only one distress meal-a-day, one sample for 25-30 days, two samples for 20-25 days, 5 samples for 15-20 days, 20 samples for 10-15 days, 3 samples for 8 days and another 20 samples for 5 days of the previous month. The data on this count suggests that 5.4 per cent of Adivasi households had survived for more than 5 days of the previous month eating only this category of food. The proportion of samples surviving only on this category of food for more than 10 days of the month is 3.4 per cent.

Three families from the total samples had no food at all for 10 days of the previous month, 1 sample for 8 days of the month, 5 samples for 5 days, 7 samples for 4 days, another 5 samples for 3 days, another 7 samples for 2 days and 3 samples for one day had no food at all. It is interesting to note that all except one of these samples are from Rajasthan. While only one family from Jharkhand could not secure any food for 5 days of the previous month, there were 30 families from Rajasthan who could not eat any food for 1-10 days of the previous month. This variation is most probably because of higher availability of jungle food and minor forest produce in Jharkhand in comparison to Rajasthan. Rajasthan sample villages had very scarce jungle food.

The monthly hunger profile of the sample Adivasi households clearly shows that 24.1 percent of the households had eaten only one poor/ partial meal-a-day for 10-30 days of the previous month, 3.4 per cent of the households had survived by eating only one distress meal-a-day for more than 10 days and 2.8 per cent samples had not eaten any food for 2-10 days of the previous month. This data suggests that 30.3 per cent of Adivasi households were facing semi-starvation during the previous month of survey.

Jungle food consumption during previous month

59.9 per cent of sample households said that they did not eat any jungle food during the previous one month of survey. 18.3 per cent said that approximately one-fourth of their diet consisted of jungle food during previous one month, 7 per cent samples said that half of their diet during the month consisted of jungle food, 7.9 per cent said that it was up to three-fourth and 6.9 per cent samples said that about 75-100 per cent of their previous month's diet consisted of jungle food only.

Protein (pulses& animal products) consumption during previous month

33.3 per cent of samples could not get any pulse or animal product even on a single day of the previous month. 3.7 per cent could get it on just one day, 10.7 per cent for two days of the month, 6.5 per cent for three days, 8 per cent for four days, 10.4 per cent for five days, 2.8 per cent for six days, 2.5 per cent for seven days, 5.7 per cent for eight days, 0.2 per cent for nine days, another 5.7 per cent for ten days, 6 per cent for 12-15 days, and remaining 4.5 per cent samples for 16-30 days of the month. These figures suggest that only 10.5 per cent of Adivasi households could eat some pulses or animal products for 12-30 days of the previous month. The remaining 89.5 per cent of samples either did not get these items at all or did not get for more than ten days of the month.

Annual Hunger Profile

A staggering 99.8 per cent of Adivasi households said that they could not get two square meals even for a single month of the previous year. Of the remaining two samples, one had secured two square meals only for one month and just one (0.1 per cent) had eaten two square meals for the whole previous year. Therefore, it is clear that 99.9 per cent of surveyed households were facing one or another level of hunger and food insecurity during the previous year. Moreover, out of 500 sample Adivasi households surveyed in Rajasthan, not a single had secured two square meals for the whole previous year. Therefore, it is extremely distressing to note that 100 per cent of sample Adivasi households in Rajasthan were facing chronic hunger throughout the previous year. When asked as for how many months of the previous year they could secure one square meal plus one poor/partial meal a day, 99 per cent of the samples

said that they did not get this kind of food even for a single month of the previous year. Two samples had secured this category of food for 11-12 months, one for 10 months, one for 8 months, one for 6 months, one for 5 months, one for 4 months and three samples had secured this kind of food for just 1 month of the previous year.

When asked as for how many months of the previous year they did manage to get two poor/partial meals-a-day, only 8.1 per cent of total samples said that they could afford this kind of food for all months of the previous year. 27 per cent of the respondents said that they did not get this kind of food even for a single month of the previous year. 2.2 per cent of the respondents had secured this kind of food just for 1 month of the year, 8.7 per cent for 2 months, 4.2 per cent for 3 months, 19.2 per cent for 4 months, 7.7 per cent for 6 months, 7.4 per cent for 8 months, 6.1 per cent for 10 months and just 8.1 per cent of the Adivasi households had secured this kind of food for 12 months of the previous year.

When asked as for how many months of the previous year they did get one poor/ partial meal plus one distress meal-a-day, only 2.7 per cent said that they had secured this kind of food throughout the year, 21.7 per cent of the samples could not get this kind of food even for a single month of the year. 7.7 per cent of the households had eaten this kind of food for 2 months of the previous year, 15.7 per cent for 4 months, 17.9 per cent for 6 months, 14.1 per cent for 8 months and 3.1 per cent had eaten this kind of food for 10 months of the previous year.

When asked as for how many months of the previous year they had to survive on just one poor/partial meal-a-day, 1.3 per cent said that they could get only this kind of food for the whole year, 3 per cent had to survive on this kind of food for 8 months of the previous year, 2.7 per cent for 6 months of the year, 15.6 per cent for 4 months, 23.8 per cent for 2 months and 10.8 per cent of Adivasis had to make do only with this kind of food for 1 month of the previous year. This data implies that 22.6 per cent of Adivasi households in these sample states had to survive only on this kind of food for 4-12 months of the previous year.

There were 11 (1.1 per cent) Adivasi households who had survived by eating only distress food for 5-11 months of the previous year. Another 39 (3.9 per cent) families could eat only this kind of food for 4 months, 50 (5 per cent) families for 3 months, 102 (10.2 per cent) families for 2 months and 77 (7.7 per cent) families for 1 month of the previous year. This data implies that 10 per cent of sample Adivasi households had to survive only on distress food for 3-11 months of the previous year. If this figure is combined with 22.6 per cent of samples who had survived for 4-12 months only on one poor/ partial meal, we get a very disturbing figure of 32.6 per cent of sample Adivasi households living in semi- starvation during the previous one year of survey.

There were 3 (0.3 per cent) Adivasi households who had survived on only jungle food for 2 months and 26 (2.6 per cent) samples for 1 month of the previous year. All 3 samples who had survived on jungle food for 2 months were from Rajasthan. Out of the 26 samples who could get only jungle food for 1 month of the previous year, 9 (0.9 per cent) were from Rajasthan and 17 (1.7 per cent) were from Jharkhand.

There were 57(5.7 per cent) Adivasi households who had not eaten any food whatsoever for one month of the previous year. However, this state of hunger was not suffered in continuation but was spread over the whole year. Therefore, it does not necessarily cause “starvation death”. But this is definitely a firm indicator of the state of semi-starvation prevailing in this group of Adivasi households. Out of these 57 samples, 42 (4.2 per cent) were from Rajasthan and only 15 (1.5 per cent) from Jharkhand.

Jungle food consumption during previous one year

51.4 per cent of households said that they did not eat any jungle food during the previous one year of survey. 23.2 per cent said that approximately one-fourth of their diet consisted of jungle food during previous one year, 7.9 per cent samples said that half of their diet during the year consisted of jungle food, 9.1 per cent said that it was up to three-fourth and 8.4 per cent samples said that 75-100 per cent of their previous year’s diet consisted of jungle food.

Protein (pulses & animal products) consumption during previous year

30.8 per cent of sample households in Rajasthan and Jharkhand could not secure any pulse or animal product even for one month of the previous year. Less than 1 per cent of sample households were able to eat some pulses or animal products during the whole previous year. 3.8 per cent could secure these items for 7-11 months, 8 per cent of samples had eaten these protein sources between 4-6 months, 7.3 per cent for three months, 19.4 per cent households had eaten these items for two months and 29.2 per cent households were able to eat these sources of protein hardly for one month in the previous year. To put these figures differently, 86.7 per cent of Adivasi households in Rajasthan and Jharkhand either could not eat any pulse & animal product or did eat for hardly three months during the year. Therefore, these figures clearly suggest that at least 86.7 per cent of Adivasi households were suffering from severe protein deficiency and were vulnerable to many opportunistic diseases. Severe protein deficiency among Adivasi children is responsible for very high infant mortality rate in these areas and this problem has now assumed alarming proportions in Adivasi areas of India.

Food Stocks at Home

To assess and understand the immediate level of hunger and food security of the Adivasi households, they were asked as to how much of food stock they had at home. 4.7 per cent of the households had no food stock at all on the day of survey, 18.7 per cent had less than 10 kg of food grains at home, 45.9 per cent of them had less than 50 kg, 15.9 per cent had less than 100 kg, 13 per cent had between 100-150kg, 3.4 per cent 150-200 kg, 6.5 per cent had 200-250 kg, 1.3 per cent between 250-300 kg, 4 per cent between 300-350 kg, 0.4 per cent had between 350-400 kg and there were only 9.7 per cent of households who had more than 400 kg of food grains at their home on the day of survey.

Adivasis' own perception about their state of food security

To get Adivasis' own perception about their current state of food security in comparison to that 2-3 decades ago, they were asked as to whether their household food security

had improved or weakened in last 25 years. A staggering 90.6 percent of total samples said that their food security had weakened.

Reasons for decline in food security

To know Adivasis' views about the processes and main reasons behind the decline in their household food security in recent past, they were asked to identify three main reasons for the same out of a list of 9 probable reasons given to them (1.Land alienation; 2.Decline in MFP/deforestation/degradation; 3.Decline in livestock; 4.Decline in actual wages; 5.Decline in work availability; 6. Growth in family size; 7. Development projects; 8.Conservation of forests/wildlife; 9.Others). 54.9 per cent of the respondents identified decline in availability of minor forest produce (MFP) due to deforestation and degradation of forests as the most important reason for weakening of their food security.

Access & availability of PDS

While Rajasthan and Jharkhand had a combined proportion of 74 per cent of sample households possessing ration cards and only 26 per cent without ration cards, the segregated data of both these sample states gives a strikingly different picture. While only 6.2 per cent of Rajasthan households were without ration cards, a staggering 45.8 per cent of Jharkhand Adivasi households did not possess any ration card.

Out of the combined proportion of 74 per cent of households in possession of ration cards in two sample States, 40.5 per cent of households possessed APL(above poverty line) cards, 50.1 per cent had got BPL(below poverty line) cards, 9.2 per cent had Antyodaya cards and only 0.1 per cent possessed Annapoorna cards. Out of 50.1 per cent card holding samples who had BPL cards, only a tiny 9.2 per cent households said that they were getting their regular quota of ration. Remaining 90.8 per cent samples were taking either partial or no ration at all. While 13.1 per cent of BPL samples from Rajasthan said that they were availing their regular quota of ration, only 3.8 per cent of Jharkhand samples could say so.

PDS supplier's refusal to give full quota was identified as the biggest reason for Adivasis' inability to avail their full ration entitlement; because the highest proportion of samples (28.2 per cent) identified this as reason for the same. An overwhelming 80.9 percent of Adivasi households were not satisfied with the functioning of PDS shops and behaviour of PDS dealers. Our survey data has revealed slightly better functioning of PDS shops in Rajasthan in comparison to Jharkhand. While the proportion of dissatisfied households was 75.7 per cent in Rajasthan, that proportion in Jharkhand was as high as 87.9 percent.

FREEDOM FROM HUNGER CAMPAIGN

The Centre for Environment and Food Security (CEFS) has launched a Freedom from Hunger Campaign to make India a 'Hunger-Free Country'. This Campaign was launched on 10th February 2005 at India International Centre, New Delhi in the presence of over 200 activists, scientists, intellectuals, government officials, policy makers, farmers' leaders, members of diplomatic missions and various international and UN agencies. The Campaign was jointly launched by Magsaysay Awardee Social activist **Aruna Roy** and **Susan George** (author of landmark book on hunger "**How the Other Half Dies**"). To mark the launch of Freedom from Hunger Campaign, Aruna Roy delivered the First Freedom from Hunger Lecture.

The **Freedom from Hunger Campaign** acquired momentum during 2005-06. In a very short period with tiny budget and small infrastructure, the Freedom from Hunger Campaign has been able to draw the attention of Indian Parliament and various ministries and agencies of the Government. In May 2005, some members of Rajya Sabha (Upper House of Parliament) asked questions about CEFS and its Freedom from Hunger Campaign. On 6th May 2005, Mr. Sharad Pawar, Union Minister for Agriculture, Consumer Affairs, Food and Public Distribution gave written answers to all these questions on the floor of Rajya Sabha.

The Freedom from Hunger Campaign is a humble initiative to create awareness and understanding, and to kickoff a national debate on the political economy of hunger. Debate not for the sake of debate but to facilitate enabling legislation and public action to banish the scourge of hunger from our motherland. This Campaign is a tiny effort to bring back the issue of hunger and poverty in mainstream intellectual discourse, at the centre of public policy and on the conscience radar of the nation. Since hunger is essentially a political condition, the key to banish hunger is to change the politics of hunger. And to change the politics of hunger, we need to bring the issue of hunger in mainstream electoral politics. Freedom from Hunger Campaign is a very modest attempt to politicize hunger in India.

As part of this campaign, CEFS will hold lectures, workshops, seminars, conferences and public hearings all over India. Apart from doing research and advocacy for a hunger-free India, we also plan to bring out a series of "Citizens' Reports" especially from the "hunger hot-spots" of the country. The Freedom from Hunger Campaign will continue till 2015 and it has been divided into three phases. The First Phase of Campaign will conclude on 15th August 2007 to coincide with the Platinum Jubilee celebrations of Indian Independence. The Second Phase of Campaign will continue till 2010 and Third Phase will conclude in 2015, the target year of UN Millennium Development Goals.

As part of Freedom from Hunger Campaign, CEFS in collaboration with India International Centre (New Delhi) is hosting a bimonthly **Freedom from Hunger Lecture Series** which will continue till 15th August, 2007. The inaugural Freedom from Hunger Lecture was given by Ms Aruna Roy on 10th February 2005. The second Freedom from Hunger Lecture was delivered by Prof. Utsa Patnaik on 12th April 2005, third lecture was delivered by Dr. Kirit Parikh on 10th June 2005, fourth by Dr. Vandana Shiva on 10th August 2005, fifth by Prof. C. Douglas Lummis on 14th October 2005, sixth by Prof Jayati Ghosh on December 9th 2005, seventh by Dr. Ashok Khosla on 20th January 2006 and the eighth lecture in this series was delivered by Dr. Devinder Sharma on 17th March 2006.

The copies of Freedom from Hunger Lectures are posted on CEFS Website (<http://www.cefsindia.org>). We plan to publish all the lectures delivered in this series in two volumes. This lecture series has become a popular intellectual event of the Capital and is attended by a large number of activists, scientists, intellectuals, government officials, policy makers, farmers' leaders and members of diplomatic missions and various international agencies.

There are a number of programmes and activities to be carried out during the first phase of Campaign. But we have decided to focus mainly on two issues during the first phase. The first issue we are going to focus on is - Livelihood crises and hunger in Adivasi areas of India. The second issue we would focus on is - Agrarian distress and farmers' suicides : Its implications for India's sustainable food security.

Public Debate on Economic Growth vs. Ecological Security

Realizing the importance of discourse on interface and inter-linkages between economic growth and ecological security, Centre for Environment and Food Security (CEFS) in collaboration with India Habitat Centre, New Delhi initiated a public debate on -"Can Economic growth and Ecological Security go together?" As part of this debate series, the first bimonthly public debate on the topic was held at India Habitat Centre, New Delhi on 10th January 2005. The panel of lead debators included distinguished environmentalist Dr Vandana Shiva and noted economists Dr Ashok Desai, Dr Prem Shankar Jha and Prof Shubhashis Gangopadhyay. This inaugural debate was moderated by eminent social scientist Prof Ashis Nandy.

The second public debate on "Economic Growth Vs. Ecological Security" was held on 4th March 2005. Eminent environmentalist Dr. Ashok Khosla (President, Development Alternatives) and distinguished economists Dr. Surjit S. Bhalla (President, Oxus Investments) and Prof. Amitabh Kundu (JNU) participated in this bimonthly debate as

lead debators. Prof. N.S. Ramaswamy, founder director, IIM-Bangalore chaired and moderated this debate. Third Public Debate was held on 20th May. Prof. P.S. Ramakrishnan, Prof. Kanchan Chopra, Dr. Devinder Sharma and Prof. Suresh Sharma spoke as lead debators.

Fourth Debate was held on 20th July, 2005. Prof. B. B. Bhattacharya (VC, JNU), Dr. R. K. Pachauri (DG-TERI and Chairperson-IPCC), Prof. C Douglas Lummis (distinguished Political Scientist & Writer) and Dr. Shekhar Singh (noted environmentalist) participated as lead debators. Initiating the debate Prof. B.B. Bhattacharya said, "There is no such thing as environment Vs economy. Both are complementary to each other. After all, economic development is possible only when you protect the environment. We may have short-term benefit by over-exploiting natural resources like water, forests and land, but to sustain the economic growth in long term, we must have ecological security. However, conflicts could arise essentially in the short-term. For a country like India, environment is not tomorrow Vs today but it is often about survival today. For example, if you deprive the tribals surviving on the forests off these resources without providing an alternative source of livelihood, for them today's survival itself becomes critical for tomorrow's survival. So, it is essentially a question of choice between faster growth vs slower growth, and not between basic survival vs economic growth."

Championing the cause of ecological security, Dr. R. K. Pachauri argued, "It is an extremely important debate. There ought not necessarily be a conflict between economic growth and ecological security. What has happened in the past is that we had divergence of approaches followed by various disciplines. Economists by and large have not looked at the ecological services provided by the natural resources of a particular society or a particular area. And typically what happens is that ecologists often ignore the economic dimensions of the available options for ecological security. What we really need to do is to ensure that this debate leads to some form of convergence which ensures that we attach right kind of value to the environment and ecology on this planet. In some cases, we have to necessarily attach a value of infinity to the ecological security of a particular location."

Bringing the issue of equity in this debate, Dr. Pachauri said that "the poor people in India derive roughly one-third of their income from the services that are provided by ecological resources. The issue of equity- who is benefiting from economic growth and who is loosing on account of ecological destruction- is very important in this whole debate. Because, we are dealing with human beings and not abstract statistics." Dr. Pachauri said that India is loosing over 10 percent of GDP on account of ecological destruction and damage to its natural resources. 11-26 percent of agricultural output is being lost on account of soil degradation alone.

Speaking about the problem of global warming, Dr. Pachauri who is Chairperson of IPCC (Inter-governmental Panel on Climate Change) said that the "Arctic region is warming up four times faster than the rest of globe. Climate Change is going to have a major impact on the agricultural output. Since largest number of our farmers essentially depend on rainfed agriculture, with the changes in precipitation that are likely to take place, we will see some very serious adverse impacts on the farming communities. All our Climate models now clearly indicate that there will be an increase not only in the frequencies of droughts and floods but also an increase in the severity of impact on the people. All of this is very bad news for agriculture."

Prof. C Douglas Lummis who is an eminent Political Scientist and writer based in Japan brought very sharp political economy perspectives to this debate. He gave a brilliant critique of the notion of economic development itself. Prof. Lummis emphatically argued that, "even though there ought not necessarily be conflict between economic growth and ecological security, given the past history of economic development, there has been very serious conflict between the two and therefore they can not go together. We are in the midst of a genuine catastrophe. The slow moving catastrophe of ecological destruction has been directly caused by economic development."

Prof. Lummis argued further, "There are some illusions about the notion what economic development is. It is assumed that economic development is a process which converts poor people into wealthy people, and eliminates poverty. It assumes that poor people

can catch up with rich people and every one can become rich. It is one of the greatest illusions that needs to be punctured and get rid off. In the last 50 years, since this project called "development" was launched at global scale essentially at the behest of US, the gap between rich and poor has increased and not decreased... Essentially economic development is a process of transforming all cultures, all societies and all economies into the Capitalist Industrial economy integrating all of them together. Its latest avatar is being called globalization. It does not eliminate poverty. It has not so far. What it does with regard to process is to modernize and rationalize poverty. Most forms of poverty like subsistence economies or modest ways of living were very inconvenient from the standpoint of capitalist industry. Because they did not yield profit. They were rationally inefficient from the stand-point of industry. The process of economic development does essentially transform an inefficient form of poverty into an efficient form of poverty. Poverty that does yield profit. Poverty which induces people to work in plantations, factories and other ways that yield profit to the industrial system."

Prof. Lummis said that economic development is essentially anti- democracy because while the collective decision making should be in the sphere of politics, in this economic process that role of people is hijacked by free market... Therefore, rich people get richer and poor become poorer. This becomes automatic as a result of free- market. Therefore, Prof. Lummis argued that economic growth as it has unfolded so far has not produced anything like economic justice, economic equality or ecological sustainability. It has only destroyed all of these.

Fifth and final Debate on Economic Growth vs. Ecological Security was held on 5th September, 2005 at India Habitat Centre. Mr. Gurcharan Das, World-reknowned Management Guru, author and Columnist, Mr. Ramaswamy R. Iyer, Honorary Research Professor, Centre for Policy Research and former Union Secretary, Water Resources, Dr. Suman Sahai, President, Gene Campaign and Prof. Smitu Kothari, noted environmental activist and Visiting Professor, Princeton University participated as lead debators in the same. Parshuram Ray moderated & chaired this debate

Initiating the discussion on the issue - 'can economic growth and ecological security go together,' director of the Centre for Environment and Food Security (CEFS) Parshuram Rai said, "Mainstream economics measures the wealth of a country by Gross National Product (GNP). However, the measurement system of GNP does not take into account unpaid work and 'natural capital'. For an example, forest is regarded as having no value until it is logged. The costs incurred on prisons and pollution mitigation also add on to GNP. The clean up costs of ecological disasters like an oil spill also add on to a country's GNP. However, self-sufficiency is seen as being uneconomical because it does not add to a country's value of goods and services. Unlike the economy, the planet does not grow, and neither do our limited supply of resources. There is therefore a limit to economic growth. Scientists believe we have already crossed this limit, and to continue exploiting natural resources could lead to a collapse of biological systems, leading to vast human misery and the irretrievable mutilation of our planet."

Emphasizing the need for ecological security, Mr. Rai argued "it is nobody's case that there should not be any economic growth so that we can enjoy air and water of Himalayan standards. However, we must know as to how much of economic growth is too much for ecological security. We must draw a Lakshman Rekha (threshold line) for economic growth. We have to strike a balance between economic growth and ecological security. We must ask ourselves as to whether prevalent economic growth models are prepared and geared to factor-in environmental sustainability. The need and challenge of the hour is to mainstream ecological security in economic growth. Our economic systems and pricing practices must learn to pay for the ecological services of the nature. So far ecological destruction has been calculated as economic growth in many cases. There are innumerable examples of this insanity globally and locally. The World Bank estimates that air and water pollution alone cost China US\$ 54 billion per year, or about eight percent of its GDP. Coming nearer home. according to a study carried out by TERI, India is loosing 7-8 % of its GDP on account of ecological destruction."

Presenting a strong case for economic growth, Mr. Gurcharan Das said, "I believe that economic growth is the best medicine for poverty alleviation. In last 25 years, about 250 million Indians have been brought above poverty line and with the current rate of economic growth, the remaining 21% of Indians will also be able to cross above the one-dollar-a-day- poverty line by 2025. However, I believe that when it comes to a trade-off between man and nature or economic growth and ecological security, the former gets a priority and rightly so. Because, giving primacy to nature over humans is immoral".

Mr. Das blamed Indian environmentalists for obstructing development and held them responsible for current power crisis in the country. He said, "our environmentalists have put all our power-plants in courts. So is the case with big dams. In India, where we get all the rain in only three months, we have to conserve water for the remaining 9 months. So, we do need big dams."

Mr. Das further argued, "India is now in the need of Second Green Revolution based on science of Genetic Engineering. It was criminal that we took 6 years for approval of BT cotton. Environmentalists have created a lot of problems for the spread and popularity of BT cotton. But talk to the cotton farmers, they are happy with it. To me the saddest thing is that the entire GM industry is going to die in our country. The companies who were investing in research are going to walk away because our regulatory framework is hostile to them. So, we might have to say good-bye to GM revolution.... Environmentalism has become like a religion, environmentalists have become fundamentalists and they are engaging in eco-terrorism."

Presenting a very powerful case for ecological security, Prof Smitu Kothari argued, "For Gurcharan Das and the country's reigning economists, the environment is a source of commodities that can be extracted and exploited to generate economic growth or it is a pristine sanctuary to take a vacation in. Their primary concern is how much is produced from nature's resources and there is little acknowledgement of what the social and ecological costs of that exploitation are. And that is their gravest and greatest failing."

Prof. Kothari further said, "Economic theory, economic indicators and economic triumphalism cannot explain how the dominant strategies of achieving economic growth are disrupting and destroying our natural foundations. These theories and pursuits cannot explain why the Arctic Sea ice or the Himalayan glaciers are melting at an unprecedented rate causing increasing flooding on the world's coastlines or why over one million hectares of productive agricultural land in India is rapidly losing its fertility or why over half of our rivers are chronically polluted. To sustain present levels of consumption in India, we have to continue to colonise and pollute vast areas of our lands, forests and water resources displacing and destroying the livelihoods of millions of people. Since Independence, planned development has displaced and dispossessed over 150 million people. Most of these development or environment refugees have barely even received cash compensation."

Prof. Kothari said that Mr. Das called environmentalists who raise these issues as "terrorists" and "eco-fundamentalists." If presenting hard scientific evidence of how we are undermining our own survival is terrorism and fundamentalism, so be it. In fact, it is modern economics that is largely blind to its social and ecological consequences and that propagates fundamentalisms based on highly selective evidence.

Prof. Smitu Kothari argued that one of the major goals of those propagating the present patterns of economic development is to achieve per capita levels of the United States of America. Mr. Das stated that if we sustain present levels of economic growth, we will "surpass American per capita incomes by 2066." This is precisely the kind of untruth that is perpetuated to justify the present pursuit of economic development. With 7% of the world's population, America consumes over 40% of its resources. Even with efficiency increases in resource use and some substitution, we will reach the earth's limits when 25% achieve American standards of living. A majority of the planet will have to suffer chronic shortages and destitution if we pursue present trends of consumption.

Giving a systematic critic of the present economic growth model, Prof. Kothari said further, "another serious fallacy of those pursuing the growth-centric model is that they

assume that a benevolent and welfarist state will redistribute the gains of growth so that greater equity and justice will prevail. In fact, quite the reverse is happening - the state is increasingly absenting itself from critical social sectors like health and education and allowing these sectors to be rapidly privatized. The experience so far clearly suggests that without massive efforts to create assets and without actively pursuing greater equity, privatization ends up excluding the poor and most vulnerable among our population.

We have reached that juncture in our collective history when it is important to acknowledge that economic security can only come on the foundation of ecological security. We need to urgently transit into more benign technologies, alternative energy options ranging from biofuels to hydrogen fuel cells (thus reducing our dependence on fossil fuels), undertake massive regeneration and redistribution of natural resource systems that are going out of production. Responsible ecological planning is good economics. A holistic environmentalism is an invitation to humility, to responsibility and to the recognition of interdependence of all life."

Participating in this public debate, Mr. Ramaswamy R Iyer said that Consumption is at the heart of the prevailing notions of development. There is an implicit assumption that the higher the level of consumption the greater the degree of development, or in other words, that a civilization which consumes more is more advanced than a civilization which consumes less. Consumption requires production; and so we genuflect before the twin gods of consumption and production. Given the demonstration effect of Western ways of living on the rest of the world, and given the reluctance of the West and in particular America to accept any significant changes in their lifestyles, it seems improbable that there is going to be a general adoption of more modest ways of living. What we call `development' is irreconcilable with what the title of this meeting refers to as `ecological security'.

Expressing a strong disagreement with those who think that economic growth and ecological security can go together, Mr. Ramasqwamy R. Iyer argued, "All countries aspire to reach the condition of America (I am using America as a symbol), the

combined effect of their 'higher standards of living' will cast an impossible burden on Planet Earth. It is simply not true that 'development' as now understood can be reconciled with 'environment' (using that as a shorthand term). Sustainable development, as proposed at Rio and reiterated at Johannesburg, is a limited and imperfect formulation, but even that seems to be a non-starter."

Mr. Iyer further argued, "it is clear that after the Industrial Revolution there was a dramatic change in the magnitude, scale and complexity of technology, and a Technological Revolution began. Soon the pace of technological change began to accelerate. It is my thesis that that pace has now become autonomous and uncontrollable. Technology is no longer humanity's servant but its master.... Humanity is now under the tyranny of technological change."

Dr. Suman Sahai said that it is possible to marry economic growth with ecological security. But it is only possible when economic growth models factor-in the issues of equity, justice and sustainability. She said that now there are innumerable examples of this sustainable development model all over the world.

Proposed Programmes for 2006-2007

Programmes on Hunger and Food Security

Freedom from Hunger Campaign:-

1-Freedom from Hunger Lecture Series in Collaboration with India International Centre (IIC), New Delhi.

In continuation of the Freedom from Hunger Lecture Series, following lectures are scheduled during April-December 2006.

Ninth Freedom from Hunger Lecture

Ninth Freedom from Hunger Lecture titled "Water: Understanding the Crisis" to be delivered by Shri Ramaswamy R Iyer (Former Union Secretary, Water Resources) on 10th May 2006.

Tenth Freedom from Hunger Lecture

Tenth Freedom from Hunger Lecture titled "Genetic Engineering and Future of Indian Farmers" to be delivered by Dr. Suman Sahai (President, Gene Campaign) on 20th July 2006.

Eleventh Freedom from Hunger Lecture

Eleventh Freedom from Hunger Lecture to be delivered by eminent financial journalist Shri Premshankar Jha on 8th September 2006. Shri Jha will speak on "Political Economy of Agrarian Distress".

Twelvth Freedom from Hunger lecture

Twelvth Freedom from Hunger Lecture titled "Redefining Poverty" to be delivered by Mr. Mohan Guruswamy (Former Advisor to Finance Minister) on 22nd November 2006.

2-Research Study on the Political Economy of Hunger in Adivasi Areas of Orissa, Chattisgarh and Maharashtra.

3-Citizens' Report on Hunger in Adivasi Areas of India

4-Survey Research on the state of hunger and food security among Dalits of Bihar

5-Comparative Research Study on the livelihood crises and distress migration in Sitamarhi district of Bihar and Mahbubnagar district of Andhra Pradesh

6-Citizens' Report on Agrarian distress& Farmers' suicides in India

7-Research Study on the political economy of agrarian distress& farmers' suicides

8-Seeds of Evergreen Revolution :

A Research Study on the emerging organic farming movement in India

9-Lectures,workshops, seminars, conferences and public hearings on hunger, food insecurity and deprivation

Programmes on Environment and Ecological Security

1-National Seminar on Interlinking of Rivers to be held at India International Centre, New Delhi on 15-16 January 2007.

2-International conference/seminar on the interface between economic growth and ecological security

3-Socio-economic&ecological audit of mining in Jharkhand& Rajasthan: A Research and Advocacy Project

4-Research Study on Development, Deforestation and livelihood crises in Adivasi areas of India

5-Seeds of Sustainable Development :

A Research Study on the initiatives, efforts, success stories, case studies and innovative experiments on sustainable development.