

LETTER OF TRANSMITTAL

Sardara Singh Johl
Chairman,
Working Group on Distressed Farmers

November 14, 2006

Dear Dr. Reddy,

Subject: Working Group to Suggest Measures to Assist Distressed Farmers

I have the pleasure of submitting the final Report of the above Working Group to suggest measures to assist distressed farmers. The Group has attempted to define 'distress' and suggested benchmark trigger points for identification of incipient distress and measures required to be taken to ameliorate distress, particularly of small and marginal farmers, including tenant farmers and agricultural labourers as well as borrowers with small loans/credit limits. The Group has, in its report, suggested various measures to assist distressed farmers, including financial counselling by banks, and introduction of an appropriate Credit Guarantee Scheme for borrowers with small loans/credit limits up to Rs. 1.00 lakh, to be administered by the Deposit Insurance and Credit guarantee Corporation.

3. On behalf of my colleagues and on my own behalf, I thank you for entrusting us with this task of critical national importance, and supporting us at all stages.

With kind regards,

Yours sincerely,

(14-11-2006)

(Sardara Singh Johl)

Dr. Y.V. Reddy
Governor
Reserve Bank of India
Mumbai

Acknowledgements

The Working Group is grateful to Dr. Y.V.Reddy, Governor, Reserve Bank of India, for entrusting this task of national importance and providing constant inspiration and encouragement. The Group is also thankful to Smt. Usha Thorat, Deputy Governor of Reserve Bank for taking active interest in the deliberations of the Group and providing useful inputs in devising the Credit Guarantee Scheme.

The Group, during its meetings at New Delhi and Mumbai as also during its field visits to the states of Andhra Pradesh, Kerala, Orissa, Punjab, and West Bengal, met with a large number of farmers, representatives from banks, insurance companies, Non-Government Organisations, Bharatiya Kisan Union, academicians of repute and administrators in its effort to get a holistic view of the problem. The Group collected a vast amount of material from various sources and deliberated extensively on the subject. Thus, the report is the culmination of collective efforts and contributions of many people, and the Group expresses gratitude to each one of them for their valuable contributions. Particular thanks are due to Shri C.S.Mishra, Chief Statistical Officer, National Crime Records Bureau for providing provisional data on suicides for the year 2004.

The Group is also thankful to Reserve Bank of India and National Bank for Agriculture and Rural Development (NABARD) for efficiently organizing the various meetings of the Group and the field-visits by the sub-groups, and providing excellent logistic and secretarial support.

The Group wishes to place on record the excellent secretarial support provided by Shri C.K.Shah, Deputy General Manager and Shri Kausik Chakrabarti, Asst. General Manager, Rural Planning and Credit Department of Reserve Bank. The exhaustive background notes prepared by them for each of the meetings of the Group had enabled the Group to have meaningful and focused discussions. They had also immensely contributed in preparation of this report.

S. S. Johl
Chairman

ABBREVIATIONS

AICIL	Agricultural Insurance Company of India Limited
AIDA	Agriculture Income Disaster Assistance
APMCs	Agriculture Produce Marketing Committees
ATM	Automatic Teller Machine
Bt	Bacillus thuringiensis
BSR	Banking Statistical Returns
CBDT	Central Board of Direct Taxes
CCEs	Crop Cutting Experiments
CCIS	Comprehensive Crop Insurance Scheme
CUG	Closed User Group
DICGC	Deposit Insurance and Credit Guarantee Corporation
DRDAs	District Rural Development Agencies
DWCRA	Development of Women and Children in Rural Areas
ETF	Empowered Task Force
EU	European Union
FCIC	Federal Crop Insurance Corporation
FDI	Foreign Direct Investment
FIIS	Farm Income Insurance Scheme
GCCs	General Credit Cards
GDP	Gross Domestic Product
GKY	Ganga Kalyan Yojana
HUDCO	Housing and Urban Development Corporation
IBA	Indian Banks' Association
IGIDR	Indira Gandhi Institute of Development and Research
IPM	Integrated Pest Management
IRDP	Integrated Rural Development Programme
JLGs	Joint Liability Groups
KCCs	Kisan Credit Cards
MCPS	Monopoly Cotton Procurement Scheme

MSP	Minimum Support Price
MWS	Million Wells Scheme
NABARD	National Bank for Agriculture and Rural Development
NAIS	National Agricultural Insurance Scheme
NBC	Net Bank Credit
NCDEX	The National Commodities Exchange Ltd.
NCRB	National Crime Records Bureau
NDDB	National Dairy Development Board
NGO	Non-Government Organisation
NHB	National Housing Bank
NISA	Net Income Stabilisation Assistance
NPA	Non-Performing Assets
NREG	National Rural Employment Guarantee
NSIC	National Small Industries Corporation
NSS	National Sample Survey
NSSO	National Sample Survey Organisation
OECD	Organisation of Economic Corporation & Development
OTS	One Time Settlement
RDO	Rural Development Officer
REC	Rural Electrification Corporation
RIDF	Rural Infrastructure Development Fund
RMA	Risk Management Agency
RRBs	Regional Rural Banks
SACP	Special Agricultural Credit Plans
SGSY	Swarnjayanti Gram Swarozgar Yojana
SHGs	Self Help Groups
SIDBI	Small Industries Development Bank of India
SITRA	Supply of improved Tool kits to Rural Artisans
SLBCs	State Level Bankers' Committees
SMR	Suicide Mortality Rate

SSI	Small Scale Industry
TRYSEM	Training of Rural Youth for self Employment
UTLBC	Union Territory Level Bankers' Committee
VAT	Value Added Tax
WTO	World Trade Organisation

Executive Summary

Agriculture has remained traditionally the most important economic activity in our country. In view of the importance of the agriculture sector in the national economy, Reserve Bank of India (Reserve Bank), the Central Government and National Bank for Agriculture and Rural Development (NABARD) have taken several policy initiatives to facilitate hassle-free flow of credit from the institutional financial sector to the agricultural/rural sector. These measures have played a significant role in enhancing credit flow to this sector. Notwithstanding these measures, the Indian agriculture has been facing difficult times and the Indian farmers have been experiencing extreme distress. In order to address this issue, the Reserve Bank had announced in Paragraph 152 of the Annual Policy Statement 2006-07, that a Working Group would be constituted to suggest measures for assisting distressed farmers including provision of financial counselling services and introduction of a specific Credit Guarantee Scheme under the Deposit Insurance and Credit Guarantee Corporation Act for such farmers. Accordingly, the Working Group was constituted under the Chairmanship of Dr. S.S.Johl and comprising eminent bankers and academicians to look into the matter. The findings and recommendations of the group are summarized below.

- Manifestation of distress is stressful behaviour arising out of social, economic and psychological reasons. However, one common factor that can be seen across all regions is that manifestation of economic distress is primarily through indebtedness. The distress may be 'systemic' (faced by a large number of households) or 'idiosyncratic' (specific to the particular household). This systemic distress may be due to production losses in two consecutive years due to natural calamities and consequent inability to repay loans resulting in increased indebtedness. A farmer will be considered to be 'idiosyncratic' distress if he meets any or both of the following criteria:

a) The farmer is indebted to the formal and informal sources of credit to the extent of more than the monetary value of the land and other productive assets owned by the family [negative net worth]

and/or

b) the interest liability on loans from formal and informal sources exceeds 50 per cent, of his gross family income [liquidity crisis leading to inability to meet even consumption requirements].

- It has also been observed that mostly the small and marginal farmers, as well as tenant farmers and farm labourers bear the brunt of crop failures. Therefore, the target group for preferential treatment should consist of small and marginal farmers, as well as tenant farmers and farm labourers.

- Analytically, the factors can be grouped either in the neurobiological or in the socio-economic domain. The reasons for the crisis are largely systemic risk, and to some extent idiosyncratic risk. In fact, various risk factors may reinforce and feed into each other. Inadequate farm income coupled with limited non-farm opportunities have led to the distress conditions in most of the cases. Other contributing factors are increasing input costs, non-availability of quality seeds, increasing pesticides usage, deskilling, supplier-induced demand in input market, inadequacy of institutional extension service and research, market uncertainties, declining public investments, and additional household/consumption requirements.

- The support system to enable the farmers for coping with distress and efforts to pull them back from the brink have been quite varied across the countries. The support ranges from credit counselling, family counselling, and skill up gradation, subsidized loan programmes, loan buyouts and innovative field level interventions to reduce cost of production without much loss of productivity. Developed countries with adequate wherewithal have supported programmes with budgetary support, while developing countries have relied on international aid linked programmes or NGOs for providing support to the distressed farmers. The interventions normally fall into four categories – Subsidies, Crop insurance, Commodity derivatives and Credit Guarantee Schemes.
- In India, Reserve Bank of India (Reserve Bank), the Central Government and National Bank for Agriculture and Rural Development (NABARD) have taken several policy initiatives to facilitate hassle-free flow of credit from the institutional financial sector to the agricultural/rural sector. These initiatives, *inter alia*, include stipulation of a target of 18 per cent of Net Bank Credit (NBC) for lending to agriculture by domestic scheduled commercial banks; introduction of Kisan Credit Cards (KCCs) Scheme and General Credit Cards (GCCs) Scheme; waiver of margin/security requirements for agricultural loans up to stipulated amounts; aligning Non-Performing Assets (NPA) norms in respect of agricultural credit with the harvesting seasons of crops; and issue of detailed standing guidelines for provision of relief by banks in times of natural calamities.
- Based on the guidelines provided by Reserve Bank, the commercial banks have also introduced One Time Settlement (OTS) scheme for small borrowal accounts up to a sanctioned limit of Rs.25,000/-, established training institutes and posted technical officers in the rural branches.
- Insurance provides cover against the risk of loss of produce or assets or health of the borrower and his family members. The insurance facilities available at present to the farmers may broadly be divided into four categories, namely, Crop and Farm Income Insurance; Weather Insurance; Asset Insurance; and Life and Health Insurance. The Agricultural Insurance Company of India Limited (AICIL) administers crop Insurance in India under National Agricultural Insurance Scheme (NAIS). At present, it covers 13 crops and is implemented in 23 states and two union territories. Apart from the above scheme, which protects farmers against only yield fluctuations, the AICIL has introduced a pilot project of Farm Income Insurance Scheme (FIIS) during Rabi season 2003-04 to take care of variability in both the yield and the market price. Weather Insurance has assumed importance in the Indian context because weather, particularly rainfall, has an overriding influence on productivity of crops. The general insurance companies in both public and private sectors provide health insurance as well as asset insurance concentrating on insuring the productive assets of the farmers like livestock, stock of grains in warehouses or otherwise, fish in ponds, animal carts, failed wells, dwelling units, pump sets, etc.
- Though a system of crop insurance is already in place, in practice, it has benefited only certain sections of the farmers and a few crops. It is understood that some steps for modification of National Agricultural Insurance Scheme have already been initiated. There is a need to educate farmers about the need for insurance so that reliance on state for normal risks of agricultural operations is reduced and limited to the subsidy payout on the crop insurance.

- Credit Guarantee functions were in vogue in India for a fairly long time. Historically, the Deposit Insurance and Credit Guarantee Corporation (DICGC), a wholly owned subsidiary of Reserve Bank, was administering the Small Loans Guarantee Scheme, 1971 with other two Guarantee Schemes. This scheme had provision for credit guarantee in respect of credit given to farmers and agriculturists (under direct finance to agriculture) for raising crops, developmental activities, conversion of crop loans up to a maximum of 3 conversions and also allied activities like pisciculture, sericulture, animal husbandry, poultry and dairy farming. The scheme was voluntary for the credit institution and operated on an automatic coverage basis under which all eligible advances were automatically covered for a uniform rate of guarantee fee irrespective of the degree of risks involved, by entering into specific agreements with the Corporation for each scheme separately. Subsequently, based on a comprehensive review made, Reserve Bank had proposed shedding of the guarantee schemes as they had, by and large, accomplished the objectives for which they had been formulated and were no longer viable.
- In order to address the problem of systemic and idiosyncratic distress, the Government, insurance companies and banks have to adopt a holistic approach.
- In case of systemic distress, the banks may offer an option to the borrowers either to get their dues converted/rescheduled as per the standing guidelines issued by Reserve Bank or to settle the dues under an OTS scheme formulated by the banks in a transparent manner with the approval of their Boards. Such borrowers will be eligible for fresh finance. On occurrence of a natural calamity in the second successive year, necessitating further rescheduling/conversion, banks may write off the dues and invoke the credit guarantee. The borrowers, whose dues have been written off, will also be eligible for fresh finance. In order to operationalise the above course of action, a viable and self-sustaining Credit Guarantee Scheme has been suggested for all borrowers availing in aggregate small loans/credit limits up to Rs.1lakh (Rupees one lakh only).
- Given its local or individualistic nature, idiosyncratic distress may need different treatment and may be primarily addressed through risk mitigation techniques like introduction of default guarantee (insurance) scheme, government relief and new insurance products.
- Among the economic causes for farmers' distress, credit related issues normally play a prominent role. For credit expansion through formal sources and improving the outreach to the small and marginal farmers banks may be encouraged to channel credit through Joint Liability Groups and be linked to the savings by the borrower members. This source, if developed with vision, has the potential to reduce dependence of the private moneylenders, and ameliorate the distress conditions to a great extent. Services of postmen and other village level functionaries can also be utilized on nominal commission basis for channeling bank credit in far-flung areas.
- Provision of more credit without proper evaluation of the credit needs and repaying capacity of the borrowers will only worsen the indebtedness situation in the farm sector. It also acts as a disincentive for the banks and financial institutions to provide the required credit. Further, requiring banks to charge

interest at flat rates, irrespective of risk perceptions, is likely to act as a disincentive for the banks to increase their lending to the sector. It is therefore, suggested that banks may be permitted to provide agricultural credit at appropriate rates of interest on the basis of repaying capacity/incremental repaying capacity estimated to be generated out of the borrowed funds and availability of other risk mitigants, rather than only on security considerations.

- One Time Settlement (OTS) rules need to be changed in such a manner that the 'standard' accounts, which were rescheduled / restructured on account of natural calamities, as also farmers defaulting on loans due to circumstances beyond their control may also qualify for OTS. However, across the board waiver of loans is not an appropriate solution to the chronic problem of farmers' distress because it vitiates the repayment culture and spoils the mutual confidence between the borrowers and lenders.

- In order to protect the small and marginal farmers, tenant farmers and farm labourers from the moneylenders charging usurious rate of interest, it is felt that a mechanism may be evolved for their inclusion into the formal financial system. The administration and civil society have to come together for this. A separate Technical Group has already been constituted by Reserve Bank of India to study the functioning of moneylenders and examine the linkages, if any, between money lending activities and formal credit channels, and devise mechanisms to regulate private moneylenders. This Group suggests enacting a 'Moneylenders regulating Act' with *inter alia*, the provisions such as (i) total liability of the borrower not to exceed double the amount borrowed (ii) cap on rate of interest at Prime Lending Rate of SBI plus a margin of, say, 4 per cent (iii) Court to have jurisdiction on the current liabilities and with retrospective effect to scrap all liabilities, if repayments have been made up to double the amount of capital or more (iv) one house and land up to 5 acres not to be attached under any circumstance and should not be taken as collaterals and (v) land and residential house to be used only to assess the worth of the borrower and to assess reasonable credit needs of the person.

- There is no remedy available at present for the farmers from the spurious inputs supplied to them. It is, therefore, felt that some legislative measures must be put in place to ensure the quality of inputs supplied by the agents/suppliers.

- In order to address the supply side issues, setting up of more centres in line with "DCM – Hariyali" may be encouraged. These centres may act as single point source for the distribution of agricultural inputs of proven quality and also as a one-stop shop for sourcing the consumption needs of the farmers. By sourcing the supplies directly from the manufacturers, these centres can offer standard products at right prices. They may also provide custom hiring services of tractors, threshers and other costly farm equipment to the farmers at a reasonable rent so as to reduce the capital cost for the farmers. Such outlets may be encouraged to be set up at all the growth centres/mandi centres. possible linkage with the banks for funding purchase of agricultural inputs and hiring services through the Kisan Credit Card mechanism needs to be explored. Entrepreneurs should be encouraged to establish proper cold storage facilities with uninterrupted power supply should be available within easy reach of the farmers.

- Adopting contract farming may also help the farmers achieve economies of scale and get him better price of his produce since it will reduce the number of intermediaries between the farmers and the consumers.
- Proper agricultural counseling is a specialized job and the counsellors may need proper training and sensitization. Experts from various fields like banking, insurance, and agriculture universities may be engaged by the banks on a retainer ship basis for counselling the farmers without charging them. Maintaining a permanent establishment is often considered a drain on the resources of any bank. However, it is a misplaced perception. Appointment of agricultural graduates as Rural Development Officers (RDO) to help farmers give various counselling services in every rural and semi-urban branch will pay in its own way.
- The Group does not favour provision of subsidies, in principle. However, promotional and compensatory subsidies are unavoidable in farm sector. Therefore, subsidy provided by the Government as a matter of public policy, should prefer targeted direct subsidy to small and marginal farmers. Direct subsidy may be provided in the form of input subsidy. A scheme involving back-ended interest rate subsidy through banks may be made available to the target group on prompt repayment of bank loans. This addresses the issue of 'moral hazard' of giving subsidy in the form of 'input stamps' for borrowing farmers.
- Commodity futures market is an important step for providing some respite to the farmers. In the last couple of years, the Ministry of Consumer Affairs, Government of India, and the Forward Markets Commission, which is also the immediate regulator, have opened the gates for futures trading in over 120 commodities with the basic objective of presenting to the producers, suppliers and end-users an opportunity to hedge their price risk. However, the small and marginal farmers are not in a position to reap the benefits. The trading lots are often much bigger than what is produced by a small farmer. Under such circumstances, the role of an aggregator assumes importance. Banks are the best-suited institutions to assume this role. But this needs legislative changes in the Banking Regulation Act, 1949. It is suggested that action in this regard may be taken expeditiously.
- The Working Group on Warehouse Receipts and Commodity Futures, appointed by the Reserve Bank, recommended creation of an umbrella structure of Closed User Group (CUG) for everyone engaged in commodities business including commodity exchanges, Agri Produce Market Committees (APMCs), warehouses, exporters, importers, etc. pending the above legislative changes. Considering the advantages of this recommendation, speedy implementation thereof is recommended.
- It is to be realized that income problems of the farm families and rural households cannot be solved with the income from farm sector alone. The farm holdings are so small that in spite of best efforts and optimal utilization of available production and marketing technology, the income levels of small and marginal farmers and the farm labour dependent upon farm work alone cannot alleviate their distress and poverty. These populations have to be provided with supplementary sources of income, and small and marginal farmers have to convert into part time farmers.

- Credit is not a panacea for all the problems of the farm sector. Providing of credit to the farm sector without considering its absorptive capacity will push the farmers into the vortex of irretrievable indebtedness and distress. For growth and development of farm sector and for improving the farm incomes and of the labour working on farms, the farm size must increase and become a viable business proposition. This can happen only when sizeable portion of farm population either moves out of this sector or becomes part-time farmers on small and medium size farms. In order that this happens, the rural population must be helped to build their capacity to move out and compete for off-farm employment opportunities. It is the equalization of opportunities and access to education, health, life amenities and gainful employment opportunities that would take the significant portion of the society from the rural areas out of the quagmire of socio-economic inadequacies, wants and sufferings.

- In order to improve the financial condition of the rural population, significant portion of which comes from agricultural background, the Government has been administering a few employment guarantee schemes. Notable among them is Swarnjayanti Gram Swarozgar Yojana (SGSY). A new concept that has taken shape recently is the employment guarantee in rural areas. The first phase of the National Rural Employment Guarantee (NREG) Act, which has come into force in 200 districts of the country since February 02, 2006, envisages livelihood security in rural areas by providing at least 100 days of guaranteed employment in a financial year to one member in every household, whose adult members volunteer to do unskilled manual work.

- Given low returns in agriculture, any intervention in the field of agriculture will have to include a large non-agricultural component into it. Such non-farm activities need to be seen as complementary to the farm activities without any apparent conflict between them. Agro-based industries and other gainful employment opportunities should be enhanced. The agro industries should be based on the current production patterns of the region. It can also be related to manufacture of compost, bio-fertilizers and bio-pesticides. The secret of amelioration of farmers' 'distress' may well lie in the non-farm sector. These farmers must either be empowered with alternative skills to make them capable of moving out of farm sector or be enabled to become part-time farmers.

- Adequate financial provisions may be made for government schools, especially in the rural areas. Also there should be special thrust on science and mathematics at all the government schools, particularly at the village schools.

- Apart from education, health of a person makes him or her capable of performance at any work, physical or mental. The health care system needs a complete overhaul. For this a two-pronged approach is necessary: a) providing for health insurance and Medi- Claim services with subsidies for the people living below poverty line in the rural areas and agriculturist families operating up to two hectares of land and all the agricultural labour families in the rural areas and b) organizing Multi-specialty Hospitals with a community of at least 50 doctors (specialists from different disciplines) for every group of three blocks covering around 300 villages.

- Employment opportunities must be created near at hand so that they work during day time in the industrial enterprises and return to their villages in the evening and tend to their farm work. In order to encourage industries and their ancillaries to be located in rural areas and make them accountable for keeping pollution-free environment and provide jobs to the local population, bold decisions have to be made in respect of exemption from all kinds of central and state taxes, capital subsidy on clean industrial enterprises, compulsory state-of-the-art effluent treatment, if any, and at least 80 per cent employment of the local workers from rural areas.

- Thus, support to quality education, health and medical services and gainful employment opportunities created in the rural areas will go a long way in alleviating the distress of the agricultural and rural population and will put the economy on a higher growth path that will be perceptibly inclusive in its very nature. From the credit point of view, this will generate substantially enough flow of demand driven credit.

Section – I

Introduction

1.1 Agriculture has remained traditionally the most important economic activity in our country. Though its share in the economy has declined over the years from 46% of the GDP at factor cost and constant prices in 1970-71 to about 20% of GDP in 2004-05 (Handbook of Statistics on the Indian Economy 2004-05) due to faster growth of the industrial and services sectors, it still retains an important position in the Indian economy. Farming is the principal means of livelihood for about 65 per cent of India's population (National Commission on Farmers, 2005).

1.2 In view of the importance of agriculture sector in the national economy, Reserve Bank, the Central Government and NABARD have taken several policy initiatives to facilitate hassle-free flow of credit from the institutional financial sector to the agricultural/rural sector. These initiatives, *inter alia*, include stipulation of a target of 18 per cent of NBC for lending to agriculture by domestic scheduled commercial banks; introduction of KCCs Scheme and GCCs Scheme; waiver of margin/security requirements for agricultural loans up to stipulated amounts; aligning NPA norms in respect of agricultural credit with the harvesting seasons of crops; issue of detailed standing guidelines for provision of relief by banks in times of natural calamities, etc. These are discussed in more detail in Section IV of this report.

1.3 These measures have played a significant role in enhancing credit flow to this sector. While the agriculture credit by public sector banks has increased from Rs.23338 crore as at the year ended March 1995 to Rs.154900 crore (15.2% of NBC)* as at the year ended March 2006. Similarly, the quantum of agricultural credit provided by the private sector banks has increased from Rs.841 crore to Rs.36185 crore (13.5% of NBC)* during this period.*

1.4. Notwithstanding these measures, the Indian agriculture has been facing difficult times and the Indian farmers have been experiencing extreme distress. The NSSO pointed out in 2003 that the inequality in income between the rural and urban households, and between the cultivators and non-cultivators has been growing. Apart from the economic poverty, rural households suffer from deprivation in terms of education and health. It also revealed that only 27 per cent of the total households received credit from formal sources while 22 per cent received credit from informal sources. The remaining households (i.e. 51%), mainly small and marginal farmers, have virtually no access to credit. The 61st round of the NSS conducted during 2004-05 stated that 22 per cent of the country's population, translating into about 230 million people, is poor. Almost all the studies indicate that poverty is more palpable in rural areas than in urban areas.

1.5 A vast majority of India's rural poor is concentrated in Uttar Pradesh, Bihar, Madhya Pradesh, Maharashtra, West Bengal and Orissa. The first three states account for about 36 per cent of the country's population, but account for about 48 per cent of the poor. About 48 per cent of the rural poor are agricultural labourers and more than 28 per cent are self-employed in agriculture. Thus, a majority of the workforce is still dependent on agriculture. At constant (1999-2000) prices, investment in agriculture has been rather stagnant in recent years: Rs.43,123 crore in 2004-05 as compared to Rs.43,473 crore in

* Figures provisional

1999-2000. As a result, the ratio of investment to GDP fell from 2.2 per cent in 1999-2000 to 1.7 per cent in 2004-05. The decline is mainly on account of private investment, which has fallen from Rs.35,719 crore to Rs.30,532 crore over the same period. On the other hand, public sector investment in agriculture has shown signs of revival, increasing from Rs.7,018 crore in 2000-01 to Rs.12,591 crore in 2004-05.

1.6 A new phenomenon observed is the emergence of 'new poor' among the agricultural households. The distress among these sections is being felt more strongly in the States of Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Maharashtra, Gujarat and Punjab, which have relatively more developed agriculture, and have seen strong peasant movements in the colonial and post-independence periods.

1.7. The spate of suicides by farmers in different parts of the country is a palpable manifestation of this unfortunate state of affairs. In order to address this issue, the Reserve Bank had announced in Paragraph 152 of the Annual Policy Statement 2006-07, that a Working Group would be constituted to suggest measures for assisting distressed farmers, including provision of financial counselling services and introduction of a specific Credit Guarantee Scheme under the Deposit Insurance and Credit Guarantee Corporation Act for such farmers. Accordingly, Reserve Bank constituted a Working Group comprising the following:

1. Shri S.S. Johl, Vice Chairman, Punjab State Planning Board, Chandigarh (Chairman).
2. Dr. Y.S.P. Thorat, Chairman, National Bank for Agriculture and Rural Development, Mumbai (Member).
3. Shri. H.N.Sinor, Chief Executive, Indian Banks' Association, Mumbai (Member).
4. Shri. B.D.Narang, former CMD, Oriental Bank of Commerce, New Delhi (Member).
5. Prof. M.S.Sriram, Indian Institute of Management, Ahmedabad, (currently with IIM, Bangalore) (Member).
6. Shri Ashok Bandopadhyaya, Chairman, West Bengal Infrastructure Development Finance Corporation Ltd., Kolkata (Member).
7. Shri Suresh Kisan Veer, Chairman, Satara District Central Cooperative Bank Ltd., Satara (Member).
8. Dr. Srijit Mishra, Indira Gandhi Institute of Development & Research, Mumbai (Member).
9. Shri C.S.Murthy, CGM-in-Charge, Rural Planning and Credit Department, Reserve Bank of India (Member Secretary).
10. Shri M.P.Kothari, CGM, Deposit Insurance and Credit Guarantee Corporation (Permanent Invitee to the Group's meetings).

1.8 The terms of reference for the Group were:

- i) to delineate the circumstances under which a farmer can be treated as a distressed farmer, keeping in view the findings of recent studies on such farmers;
- ii) to review the international experience in assisting distressed farmers including provision of financial counselling and planning services;
- iii) to evolve a Credit Guarantee Scheme under the DICGC Act for distressed farmers, keeping in view the earlier experience of Credit Guarantee Scheme; to suggest measures for providing financial counseling and risk mitigants for distressed farmers; and
- iv) any other relevant matter.

Methodology adopted by the Group:

1.9 It was realized that it might not be possible to generate elaborate primary data due to time-constraints. It was also not considered advisable to work on secondary data alone. Therefore, it was decided that data available from other sources may be utilized in conjunction with meetings, and interface with bankers and other special invitees, focused group discussions, and field visits to a few districts of Orissa, West Bengal, Kerala, Andhra Pradesh and Punjab.

1.10 Accordingly, sub-groups of the Working Group were formed, which had meetings with a cross section of farmers, farmers' associations, district level civil and police authorities, representatives from commercial and co-operative banks operating in the regions and a few Non-Government Organisations (NGOs) active in providing relief and succour to the distressed farmers.

1.11 The Group had also met senior level officials from a few commercial banks (viz. Canara Bank, Syndicate Bank, State Bank of India, Punjab National Bank, Bank of India, Andhra Bank and Allahabad Bank), who are in charge of credit for agriculture and rural development, to ascertain the measures taken by them to alleviate farmers' distress and to explore possible risk mitigation techniques. The Group had also met representatives from the insurance companies (viz. ICICI Lombard, Oriental Insurance Co. Ltd., Agriculture Insurance Company of India Ltd. and IFFCO Tokio General Insurance Co. Ltd.) offering various insurance products to farmers in the form of crop insurance, weather insurance, assets insurance, health insurance, and livestock and cattle insurance. In addition, the group had met certain reputed agricultural economists. All these discussions provided useful inputs to this report.

Issues to be addressed

1.12 The issue of farmers' 'distress' is a vexed one. 'Distress' is the result of a complex interplay of a myriad issues and risks. Therefore, it will not be prudent to address the issue in isolation of the causative factors. Farmers' 'distress' is not due to indebtedness alone. There are several other factors such as social, psychological, genetic and family related developments that contribute significantly to this. However, keeping in view the scope of this report, suggestions are restricted to the possible economic measures alone.

1.13 Among the economic causes for farmers' distress, credit related issues normally play a prominent role. It has also been observed that mostly the small and marginal farmers, as well as, tenant farmers and farm labourers bear the brunt of crop failures. Since the impact of such conditions may be less significant for large farmers due to their ability to fall back on their savings in times of need, a differentiated approach is to be adopted in order to address the issue of farmers' distress. Therefore, the target group for preferential treatment should consist of small and marginal farmers, as well as, tenant farmers and farm labourers. In order to protect these farmers from the money lenders charging usurious rate of interest, it is felt that a mechanism may be evolved for their inclusion into the formal financial system. A separate Technical Group has already been constituted by Reserve Bank to study the functioning of money lenders and examine the linkages, if any, between money lending activities and formal credit channels.

Organisation of the report

1.14 The interim report is divided into six sections. This Section presents the background, constitution and terms of reference of the Working Group, methodology/approach adopted by the Group and the contents in brief of the subsequent chapters, while Section II deals with the definition of 'distress', with financial, sociological, psychological and genetic connotations. This chapter also attempts to put forth a mechanism to diagnose incipient distress, manifested distress and acute distress. Section III discusses international experience in respect of supporting measures such as farm subsidies, insurance, commodity markets and exchanges, etc., and curative measures (which are specific) like supplementary support during distress. A status report on the existing guidelines/products available from various sources in India, viz., Government of India/Reserve Bank, banks, insurance companies, DICGC has been presented in Section IV. Section V analyses in detail the various factors leading to distress. This chapter has endeavoured to develop a matrix based on both demand and supply side factors and the risk factors. The trigger points for the relief measures to mitigate systemic as well as idiosyncratic risks of the farmers and the features of the CG S being recommended by the group are given in this section. While the credit related recommendations of the group are shown in sections IV and V in bold face, Section VI delineates non-credit related measures to be taken to alleviate distress of farmers.

Section II

Defining Distress

2.1 Farmers' distress is a complex issue and it is difficult to arrive at an operational definition of distress. The roots of the word "distress" has been derived from the Latin word "*Districtus*" and has been used to imply a range of meanings like psychological suffering, a state of adversity, anxiety or mental suffering, to be disturbed, besieged by problems or upset etc. Manifestation of distress is stressful behaviour arising out of social, economic and psychological reasons. Therefore there are various layers to the word and the concept of distress. However, it is important to arrive at an operational definition of distress.

2.2. Recent happenings in the agricultural sector clearly indicate the manifestation of distress in the form of farmers' suicides. However, it is important to recognize the fact that this is the ultimate unfortunate step that a farmer takes. The household possibly goes through extreme stress before the event gets triggered. However, there might be several households where the suicide might not have happened, but still they might be in a precarious position. Given that there are various dimensions to the problem of define distress it would be difficult to arrive at a widely acceptable definition of 'distress'. However, for the purpose of the extent exercise, the focus of the Group would be restricted to mostly the economic aspect that leads to "distress".

2.3. While trying to understand this complex phenomenon it may be important to look at some connective causality that could lead the farmer to the brink. This would help us get a sharper focus on distress. Distress could be caused by some devastating event that takes away the well being of a household. However, such an event creates a crisis that might happen under exceptional circumstances. In such circumstances there might be a need for undertaking rehabilitative measures. But usually distress is a result of not one, but multiple shocks in a manner that it pokes a gaping hole in the safety net of any household.

2.4. It is also seen that usually the ultimate effect of distress that results in suicides could be quite personal and exclusive in nature and might happen across different strata of society and/or in different agro-economic zones.

2.5 While we have seen farmers' suicides in diverse areas such as Vidarbha in Maharashtra, drought prone areas of Northern Karnataka, Telangana region of Andhra Pradesh, etc. where we could clearly identify the basic causes of distress relating to the mismatch between available natural endowments and the aspirational levels of agriculturists, the reasons could also be due to consumerism-led indebtedness leading to distress (as is the case in Punjab and Kerala). Thus, it would be difficult to isolate the cause of distress to just backwardness of a region.

2.6 However, one common factor that can be seen across all regions is that the manifestation of economic distress is primarily through indebtedness. Therefore, when we de-construct the concept of distress, it is possible for us to find an explanation of distress in the level of indebtedness. The indebtedness is compounded by the lack of liquidity to service the maturing obligations. Very much the

way corporate sickness is defined in terms of erosion of net worth and lack of liquidity, household distress could also be defined on similar terms.

2.7. What is appropriate for the corporate could as well be adapted to the individual households in the context of economic distress. If we were to adapt the same criteria then we are looking at the twin factors of indebtedness, possibly leading to negative net worth and liquidity crunch leading to an inability to service the maturing obligations.

2.8. While the definition of distress has to necessarily remain at the household level because each household might have differing risk absorption capacity, as well as, endowments to deal with set backs, it is also important to see if there are any macro parameters that may cause large scale distress at the household level. In this context, the definition of the Government of India while announcing the Farm Credit Package on June 18, 2004 could be examined. The definition in the package was articulated as under:

“Farmers who have suffered production and income losses on account of successive droughts, floods or other calamities (in districts declared as calamity affected by the State Government concerned) will be treated as farmers in distress and provided debt relief, and their debts will be rescheduled/ restructured.”

2.9. The above definition also addresses the issue of distress through the route of indebtedness. However the definition looks at macro level trigger points that affect all the farmers in general in the area. This definition is also somewhat restrictive as it identifies only natural calamities as trigger point. In many cases, the trigger points need not necessarily be driven by natural calamities. The distress could be driven by incommensurate yield on account of changing agricultural practices; failure of inputs such as seeds not germinating or being of indifferent quality, pesticides not being effective, resources not being available at the appropriate time or failure of wells and market failure leading to unremunerative prices. All these factors could be outside the realm of a natural disaster and could be strong trigger points. Therefore, it would be desirable to look at distress from its manifestation rather than from the point of trying to identify individual causal points.

2.10. As a part of the deliberations of the working group, the Group had considered the following two more operational definitions

a) “Distressed farmer is one, who has suffered repeated income/ psychological shocks due to failure of investment, weather, crop production or markets, and which has crippled his ability to meet his financial and other family obligations; and feels humiliated by the castigations of the lenders and, in the absence of coping mechanisms, contemplates/takes the extreme step of voluntarily ending his life.”

b) “Distressed farmer is the one who, in spite of his/her best rightful effort, is not able to earn income enough from his/her farm and non-farm activities to meet his/her genuine family needs. As a consequence, he/she borrows from institutional and/or private sources, but is not able to generate enough additional repaying capacity to retire these loans, thereby landing into intractable indebtedness. In the circumstances, he/she might take desperate step of even suicide.”

Both the definitions rightfully focused on the individual under distress, as the manifestation of distress at the household level was leading to individual suicides.

2.12. Based on the review of available literature and the field reality, it has been considered prudent to restrict the definition of distress to economic distress. It is important to focus on economic distress, given the fact that any relief and rehabilitation mechanism has to necessarily flow through the banking system. If it has to flow through the large network of banking system, it should be in some ways easily measurable and implementable without the need for detailed data collection and processing at the grassroots level. Thus the following operational definition of distress is suggested by the group:

“A farmer will be considered as distressed if it meets any or both of the following criteria:

a) The farmer is indebted to the formal and informal sources of credit to the extent of more than the monetary value of the land and other productive assets owned by the family [negative net worth] and/or,

b) The interest liability on loans from formal and informal sources exceeds 50 per cent, of his gross family income [liquidity crisis leading to inability to meet even consumption requirements].”

2.13 While the above operational definition identifies distress at the household level, if there are larger geographical areas that suffer from distress they should also be pro-actively identified by the financial sector in order to take appropriate preventive measures.

2.14 This systemic distress may be due to production losses in two consecutive years due to natural calamities and consequent inability to repay loans resulting in increased indebtedness. In this regard the following causative factors were identified by the group as the points that may lead to a large number of farmer households being distressed.

- a. High level of formal and informal debt;
- b. Natural calamities resulting in crop losses or serious reduction in yields;
- c. Heavy dependence on agriculture for sustenance, with little opportunities for off-farm and non-farm activities. This would manifest in cash flows being seasonal and low level of monetization of transactions;
- d. Market failure – cropping pattern skewed towards crops that have wide price fluctuations coupled with non-functional/ operational minimum support price;
- e. Failure of the state to lift stocks at MSP where MSP is available;
- f. Excessive dependence on commercial crops, lack of diversification of crops;
- g. Falling water table and increasing instances of failed wells;
- h. Stressful social and religious practices involving avoidable expenses; and
- i. Expensive medical treatment.
- j. Market distortions due to increased globalisation.

Section III

International experience in assisting distressed farmers including provision of financial counseling and planning services.

3.1.1 Disorientation in farmer's psyche, among others, due to social, economic and psychological factors incapacitating him to cope with the consequent stress, is not typical to developing countries alone. Many countries have put in place different mechanisms to address these issues. Such experiences, in respect of a few of the countries, have been reviewed in the following paragraphs to draw upon the best practices.

3.1.2 The support system to enable the farmers for coping with distress and efforts to pull them back from the brink have been quite varied across the countries. There is a clear demarcation in the approach to assist farmers under conditions of distress governed by the economic condition. The support ranges from credit counselling, family counselling, and skill up gradation, subsidized loan programmes, loan buyouts and innovative field level interventions to reducing cost of production without much loss of productivity. Developed countries with adequate wherewithal have supported programmes with budgetary support, while developing countries have relied on international aid-linked programmes or NGOs for providing support to the distressed farmers. Some such practices obtaining in various countries are presented in **Annex I**.

3.2. Support systems to address the contentious issues relating to farmers in various countries take different shapes. Usually such initiatives aim to prevent farmers from falling into a situation of distress by addressing the causes of such distress. Such measures normally comprise dispensation of subsidies in various forms, facilitation for crop insurance and derivatives in commodity markets for a price discovery as also to hedge the risk of adverse price movements. These measures largely rest on development of systems for effectively supporting their delivery and are of enormous amounts in developed countries as can be seen from the table below. -

Direct Government Subsidies to Producers in billions of US \$				
	2000	2001	2002	2000-2002 Average
Organisation of Economic Corporation & Development (OECD)	89.2	88.0	86.1	87.8
EU	51.4	48.2	57.3	52.3
US	14.9	19.6	15.4	16.7
Combined EU/US	66.3	67.	72.7	69.0

Source: OECD. "Agricultural Policies in OECD Countries: Monitoring and Evaluation 2003

The support provided to farmers to prevent them from getting into distress can broadly be classified into those that aim at supporting the farmer during the production and marketing process, insuring him from loss of production and to protect him from the loss of income due to risk in times of extreme distress caused by natural calamities or unforeseen circumstances.

The interventions normally fall into four categories –

- a) Farm subsidies
 - Difference between target price and market price
 - Direct payment tied to past production
 - Protection of losses from international trade in agricultural commodities
 - Loan against losses when interest rates change
- b) Insurance
 - Crop
 - Livestock
- c) Commodity markets and exchanges
- d) Support in times of distress

Some of the above measures are discussed hereunder.

Farm subsidies

3.3. Subsidies are provided in various forms to assist the farmers world over. Usually it takes the shape of input, output or income subsidy. These subsidies act as an incentive to prevent exodus of people from farming activities and also to ensure basic food security in a world riddled with geo-political uncertainties. Most developed countries adopted the mode of delivering subsidies directly to the farmer as opposed to the indirect subsidies practised in India, which have distorted farm practices and market behaviour, and wrought ecological damage contributing to distress among farmers. Direct subsidies have proved to be more efficient than indirect subsidies. Only specific crops are covered under subsidy programme in most countries. . New Zealand is the only country which took the bold step of abolishing farm subsidies. Subsidy is now limited to 1-2% of the farm output, largely to support innovations and research.

Crop Insurance

3.4.1. Insurance has been the key element of policy framework in protecting farmers from falling into a state of distress due to uncertainties in crop production arising out of natural disaster or pests. In developed countries like the US, Canada, Australia, New Zealand and in the European Union, the crop insurance premia are heavily subsidized by the governments for certain crops.

3.4.2. Greece has predominantly a public sector programme. The state, through its public insurance organisation, collects compulsory premia and administers the programme by covering the losses. This system, which restricted the private sector initiatives, is now being reviewed to involve private sector also.

3.4.3. Spain and Portugal have a system of “public-private partnership”, where the state plays a key role, providing both premium subsidies and re-insurance. The private insurance industry is well integrated into the system, takes care of programme administration and contributes its share to the covering risk.

3.4.4. Italy, France, Austria and Germany have systems of agricultural insurance, which are predominantly private. The four countries differ considerably with respect to subsidies towards insurance

premia. While Germany does not subsidize insurance premia, Italy grants considerable amounts by way of such subsidies.

3.4.5. In the US, a comprehensive system of crop insurance is in place under which state involvement takes four principal forms: (a) subsidizing insurance premia; (b) covering administration expenses of the private insurance sector; (c) reimbursing acquisition costs of the private sector; and (d) providing reinsurance. Although two thirds of the country's total planted acreage of field crops (except for hay) is insured (in the year 1998) substantial emergency aid has also been administered.

3.4.6. Canada has a crop insurance programme, a subsidized savings programme for farmers viz. Net Income Stabilisation Assistance (which is now being replaced with Canadian Agriculture Income Stabilisation Programme), and an income safety net viz. Agriculture Income Disaster Assistance that secures individual's farm income at 70 per cent of the historical three-year average income.

3.4.7. There have been many attempts to establish crop insurance programmes in developing countries. A few have succeeded in creating infrastructure for sustainable risk management services but most of them have not yet been able to measure up to their expectations.

3.4.8. Globally, the total premium on crop insurance in 2001 amounted to US \$ 6.5 billion (Source: Partner Reinsurance Company, Zurich), which comes to 0.4 per cent of the total estimated value to agriculture production. Geographically, these premium payments are concentrated in the developed regions i.e. North America - 55%, Western Europe - 29%, Australia & New Zealand - 3%, Latin America and Asia - 4% each, Eastern Europe - 3% and Africa - 2%. This underscores the fact that the insurance for agriculture enjoys a greater degree of coverage in the developed economies of North America and Europe.

3.4.9. However, crop insurance is not considered to be a universal solution to the risk and uncertainties that are part and parcel of agriculture. Insurance can address only part of the losses resulting from various perils, implying that insurance has a limited role in risk management in farming.

Derivatives and Commodity Exchanges

3.5.1. Commodity derivatives like forwards, futures, options, swaps, etc are being extensively used in many developed and developing countries in the world. The two main roles played by agricultural futures markets are: (a) Hedging price risk and (b) price discovery. Though supply of agricultural commodities is concentrated at the time of harvest, demand for them is spread throughout the year. To bridge the gap between supply and demand, efficient storage is essential. Agriculturists who stock the produce are not only locking capital but are also facing the probable downside price risks also. Futures can help the stockists in hedging against price risk.

3.5.2. The developed countries and major developing economies with agricultural focus have matured futures markets. The Chicago Board of Trade (USA); New York Mercantile Exchange (USA); London Futures and Options Exchange (UK); Sydney Futures Exchange (Australia); Singapore Commodity Exchange (Singapore); Kuala Lumpur Commodity Exchange (Malaysia); Bolsa De Mercadorias & Futuros (Brazil); Buenos Aires Grain Exchange (Argentina), are some of the leading exchanges.

Credit Guarantee Schemes

3.6.1. Credit Guarantee has been used internationally as an enabling instrument to ensure flow of adequate credit to desired sectors. Internationally CGS is funded by multiple sources including government, participating financial institutions and accruals arising from investment of the guarantee fees.

3.6.2. There are caps on the extent of guarantees, which are generally linked to the net owned funds/capital of the fund. There is a system of specific guarantee in place after assessment of credit and risk evaluation. But experience has shown that across the countries credit guarantee requires support as generally the claims are more than fees collected. The issue of credit guarantee has been dealt with in detail separately elsewhere in this report.

Learning Points

3.7.1. The major learning point from the international experiences is that subsidies distort the interplay of economic forces. However, direct subsidies are preferred as they are less damaging than indirect subsidies. Also, the direct subsidies are more transparent in their delivery and administration. New Zealand experience has shown that family farming can sustain even without subsidies in the long run.

3.7.2. Crop insurance on actuarial basis is not operative completely in any country. Subsidies are necessary to ensure viability of the product. Larger coverage enables reduction of subsidy. There is a need to educate farmers about the need for insurance so that reliance on State for normal risks of agricultural operations is reduced and limited to the subsidy payout on account of crop insurance.

3.7.3. Unless there is depth in the derivatives market for commodities, the futures markets would be distorted by the speculators and their herd behaviour. There is a need to regulate the limit on net forward sale contracts of individual players in the market to a reasonable multiple (ideally the hedge-cover ratio) of the underlying stocks held. Barring a few markets in developed countries, the traders who speculate on agricultural commodities largely use the derivatives market.

3.7.4. The reaction of the governments to natural calamities or disasters varies. The developed nations provide relief to supplement the mechanisms of insurance and farm subsidies. The less developed countries, especially the poorest among them, do not have adequate resources of the State to provide relief either. Besides, budgetary support, they also rely on international aid and NGOs to provide relief to disaster stricken people. In developing nations the situation is mixed, the mechanism of insurance is limited and is supplemented by relief support from government.

3.7.5. The Risk management tools at the disposal of farmers can comprise-

❖ On-farm strategies entailing selection of products with low risk exposure (e.g. products benefiting from public intervention), choosing products with short production cycles, holding sufficient liquidity or diversifying production programmes. Evidence from European agriculture suggests that the strategy of diversification, which was adopted between 1975 and 1997, led to the share of non-specialised agriculture falling from 32 per cent to 17 per cent.

- ❖ Risk-sharing strategies include marketing and production contracts, vertical integration, hedging on futures markets, participation in mutual funds and insurance.
- ❖ Diversification of income generation through increasing the share of non-farm income.
- ❖ Public assistance (Disaster aid).

Some International Credit Guarantee Systems:

3.8.1. While reviewing some of the existing credit guarantee systems in other countries a few common points emerge.

- Most of the systems have multiple sources of funding. The major funding comes from the Government or its agencies and participating financial institutions. Guarantee fee collected and interest on investments there from form a small portion of funds.
- There is a cap on the extent to which guarantees can be issued by some of the funds. This cap is in relation to the net owned funds/capital of the fund.
- The system of specific guarantee (after credit and risk evaluation) exists in most countries. The Indian system of automatic bulk coverage is not adopted by most of them.

3.8.2. The features of some of the existing credit guarantee systems in other countries are enumerated in **Annex II**.

Section – IV

Indian experience

4.1 In view of the importance of agriculture in the national economy, the deteriorating financial condition of agriculturists in India has been attracting a lot of attention of our policy makers in the post-independence period. As a result, a number of initiatives have been taken from time to time by the Government of India, Reserve Bank and NABARD to ameliorate the problems faced by the agricultural sector in general and agriculturists, in particular. Main thrust of all these steps has been to increase the flow of credit to this sector on one hand and to ameliorate the condition of the farmers on the other. Some of the important measures taken in this regard are listed below:

Steps taken by Reserve Bank/Government/NABARD so far:

4.2. Reserve Bank, the Central Government and NABARD have taken several policy initiatives to facilitate hassle-free credit flow from the institutional sources to the agricultural sector. Some of these measures are given below:

a) Reserve Bank stipulated a target of 18 per cent of NBC (within the overall target of 40 per cent of NBC for priority sector lending) for lending to agriculture by domestic scheduled commercial banks. As against this, the public sector banks have achieved 15.2 per cent* of the NBC as on the last reporting Friday of March 2005-2006. Private sector banks have achieved 13.5 per cent* the NBC during the same period. Though the target has not been achieved by these banks in percentage terms, the credit to agriculture has increased considerably in absolute terms and has been showing substantial increase through time. While the agriculture credit by public sector banks has increased from Rs.23, 338 crore as at the year ending March 1995 to Rs.1,54,900 crore* as at the end of the year ending March 2006, that by the private sector banks has increased from Rs.841 crore to Rs.36,185 crore* during the period.

* Figures provisional

b) The public sector banks have been formulating SACP since 1994. As recommended by the Advisory Committee on Flow of Credit to Agriculture and Related Activities from the Banking System (Vyas Committee), and announced in the Mid-Term Review of Annual Policy for 2004-05, the SACP mechanism has been made applicable to private sector banks also from the year 2005-06. In response, the achievement by these banks in agricultural lending during the year 2005-06 is encouraging inasmuch as they have disbursed Rs.31,199 crore as against the target of Rs.24,222 crore. The particulars of loans disbursed by the public sector banks to agriculture under SACP for the years 2002-2003 through 2005-06 are as under:

(Rs.crore)		
Sr.No.	Year	Disbursements
1.	2002-2003	33,921.05
2.	2003-2004	42,210.77
3.	2004-2005	65,217.72
4.	2005-2006	94,277.79

c) In order to provide hassle-free crop loans to farmers, NABARD issued guidelines in August 1998 in respect of KCC Scheme. It had revised the scheme in 2004. The revised scheme covers term credit as well as working capital for agriculture and allied activities, and a reasonable component for consumption needs. Since inception of the scheme, public sector banks have issued 2.23 crore KCCs up to June 30, 2006

d) Several recommendations of the Vyas Committee have been accepted and communicated to banks for implementation. These, *inter alia*, include: (i) waiver of margin/security norms for agricultural loans up to Rs 50,000, and in case of loans for agri-clinics and agri-businesses up to Rs 5 lakh; (ii) inclusion of investment in securitised agricultural loans under priority sector; (iii) aligning NPA norms in respect of direct agricultural lending with the cropping seasons; (iv) bringing about procedural simplifications; and (v) financing of oral lessees and landless agricultural labourers through the SHG and JLG approach.

e) The Service Area Approach has been reviewed and the restrictive provisions of the scheme were dispensed with.

f) In order to encourage banks to lend directly to the priority sector borrowers, the facility of treating investments made by banks in special bonds issued by specified institutions (NABARD, SIDBI, REC, NSIC, NHB, and HUDCO) as their indirect lending to the priority sector/agriculture have been phased out.

g) In order to help farmers dispose of their produce at economically viable prices, advances granted by banks up to Rs.10 lakh to farmers against pledge/hypothecation of agricultural produce including warehouse receipts for a period not exceeding 12 months are treated as direct agricultural advances under the Priority Sector.

h) In order to ensure better financial inclusion, Reserve Bank has also advised banks to make available a basic banking 'no-frills' account with either 'nil' or very low minimum balances and charges to the vast section of rural population. Regional Rural Banks (RRBs) were also advised to consider providing these account holders with a small overdraft facility. Till June 2006, 14 RRBs have reported to have opened 4,252 accounts. The number of 'no frills' accounts opened with public sector banks is reported to be about 1,53,000 up to June 2006.

i) In order to empower the vast sections of rural households, Reserve Bank has advised the scheduled commercial banks and RRBs to introduce a GCC Scheme based on the assessment of income and cash flow of the households similar to that prevailing under normal credit cards but without insistence on

security, purpose or end-use stipulations. The total credit facility to an individual borrower under the scheme would not exceed Rs. 25,000/-. Fifty per cent of credit outstanding under the GCC Scheme would be treated as part of "Priority Sector Lending". The public sector banks have issued 5,728 GCCs till June 2006. This measure is expected to help financing of landless agricultural labourers and tenant farmers.

j) Again, in order to offer small borrowers an opportunity to settle their NPAs with banks and become eligible for fresh finance, all scheduled commercial banks (including RRBs and Local Area Banks) were advised to provide a simplified mechanism for OTS of loans where the principal amount is equal to or less than Rs. 25,000/-, and which have become doubtful and loss assets as on September 30, 2005. The borrowers whose accounts would be settled under this mechanism would be fully eligible for fresh loans. The public sector banks have settled 3,09,823 accounts involving an amount of Rs.310 crore till June 2006.

k) In order to provide relief to bank borrowers in times of natural calamities, Reserve Bank has issued standing guidelines to banks. These guidelines, *inter alia*, permit banks:

i) to convert/reschedule loans and the interest due thereon for periods ranging from three to nine years depending upon the frequency of crop failures/intensity of damage to crops;

ii) to grant fresh crop loans to the affected farmers;

iii) to treat converted/rescheduled loans as current dues and as such not to compound interest in respect of loans so converted/ rescheduled;

iv) to relax security and margin norms; and

v) to provide consumption loans to agriculturists whose crops have been damaged.

l) In addition to the standing instructions issued, vide Master Circular No.RPCD.PLFS.No.BC.10/05.02.02/2006-07 dated July 10, 2006, Reserve Bank has issued additional guidelines to the banks immediately on occurrence of natural calamities. Such announcements made by Reserve Bank in the recent past to help borrowers affected by natural calamities are as under:

i) In view of the loss of life and property caused by the Tsunami in December 2004 in the states of Andhra Pradesh, Tamil Nadu and Kerala, and the Union Territories (UTs) of Puducherry, and Andaman and Nicobar Islands, the convenor banks of the SLBCs/UTLBCs in these states/Union Territories were advised to assess the situation and take immediate measures to provide appropriate relief to the affected people in terms of our standing guidelines.

ii) On the basis of the recommendations of the Empowered Task Force (ETF),constituted under the chairmanship of the Regional Director, Reserve Bank, Kolkata, to accelerate provision of relief measures to the Tsunami affected borrowers in the Union Territory of Andaman & Nicobar Islands, and for adopting a bank specific approach,. UTLBC convener bank for Union Territory of Andaman and Nicobar Islands (State Bank of India), was advised to bring the recommendations of the Task Force to the notice of the banks in the Union Territory for early implementation

iii) In case of other natural calamities affecting the lives of people in the recent past viz. floods in Maharashtra (July 2005), earthquake in Jammu & Kashmir (October 2005) and unprecedented rainfall in Tamil Nadu (November/December 2005), Reserve Bank took proactive action and advised the respective convenor banks of the SLBC to assess the situation and take immediate measures to provide appropriate relief to the affected people in terms of standing guidelines.

iv) Consequent upon the announcement made in the Mid-Term Review of Reserve Bank's Annual Policy Statement for the year 2005-06, an Internal Working Group was set up in the Reserve Bank to look into the whole gamut of issues involved and to suggest suitable revisions and additions to the existing guidelines on relief measures to make them more comprehensive. The Internal Group has recommended, among other things, allowing opening of new accounts, customers of one bank to use Automatic Teller Machine (ATM) networks of other banks for cash withdrawals with charges being borne by the parent bank, and increasing ATM daily cash withdrawal limits and dispensing cash through mobile ATMs. The internal group has also recommended deferring of payments and waiving of late fees and penalties related to non-payment of dues by credit cardholders residing in areas affected by natural calamity for a period of one to two months and avoiding reporting of adverse credit information by credit card issuing banks.

v) The relief measures recommended by the internal working Group include raising the consumption loan limit from Rs 250 to Rs10,000 without any collateral, with a provision for further enhancement to Rs 25,000 at the bank's discretion. The reliefs to be extended may include freezing the account and lowering interest rates as well as avoiding reporting adverse credit information.

vi) The Group has also recommended that banks may be advised to formulate a full-fledged comprehensive business continuity plan which should include opening of temporary branches for a period of 30 days, opening of satellite offices, extension counters or mobile banking facilities, alternative arrangements for supply of currency notes in the affected areas, opening of repositories at post offices and treasuries, facilitating expeditious opening of bank accounts. For availability of information on the relief measures, the Group has also suggested setting up of a control room/help line at the SLBC convenor banks, help line in the Reserve Bank and Nodal Offices in banks in affected areas. Based on the recommendations of the Group, Reserve Bank has issued certain additional guidelines to the banks on August 09, 2006.

m) With a view to doubling the flow of agricultural credit in three years, the Government of India announced a package of measures on June 18, 2004 and impressed upon all the agencies concerned the urgent need to significantly enhance the credit flowing to the agriculture sector. Loans disbursed to farmers by all agencies (commercial banks, co-operative banks and RRBs) amounted to Rs 1,15,243 crore as on March 31,2005. For the year 2005-06, commercial banks, co-operative banks and RRBs have disbursed Rs.1,57,479.57 crore, forming 111.69% of the annual target of Rs. 1,41,000 crore.

n) In order to make credit available at a reasonable cost to the farmers, the Union Finance Minister, in his budget speech for 2006-07 announced the Government's decision to ensure that the farmer receives short term credit at an interest rate of 7 per cent per annum, with an upper limit of Rs.3,00,000 on the

principal amount. This policy has come into force with effect from Kharif 2006-07. Accordingly, Reserve Bank has advised all public sector banks and RRBs to implement this policy immediately.

o) The Finance Minister has also proposed in his budget speech for 2006-07 that the banks open a separate window for SHGs and JLGs of tenant farmers, and ensure that a certain proportion of total credit is extended to them. Draft guidelines for financing such JLGs have been framed by NABARD, and under the advice from Reserve Bank; have been circulated by IBA, amongst its member banks for implementation. The banks have been advised to formulate self-set targets on an annual basis and monitor the progress made in this regard on a half-yearly basis.

Steps taken by the commercial banks

4.3.1. Commercial banks form an important source of formal credit in rural areas. The single most important problem faced by the rural population in India, which includes agriculturists, is indebtedness. As per the Report of the NSSO, 59th Round, 2003, the percentage of indebted rural households (from the formal sector) at the end of the year 2003, was 57.2 per cent. In such a backdrop, the role played by the commercial banks, as purveyors of credit from the formal sources, assumes immense importance. Steps taken by some of the commercial banks for increasing flow of credit to agriculture are summarized below:

a) Based on the guidelines provided by Reserve Bank in June 2004, banks formulated a scheme for providing relief measures to farmers in distress, who had experienced crop losses due to natural calamities in two of the preceding five years. Under the scheme, banks had converted the outstanding principal and accrued interest as on March 31, 2004 into a term loan repayable in five years, including an initial moratorium of two years. Similarly, based on Reserve Bank/IBA guidelines, the banks have also formulated a scheme for farmers in arrears. This scheme, however, was made available after verifying the genuineness of the problems leading to default.

b) Based on the guidelines issued by Reserve Bank, banks introduced OTS scheme for small borrowal accounts up to a sanctioned limit of Rs.25, 000/-.

c) In order to mitigate the distress faced by the farmers arising out of their dependence on non-institutional lenders, Punjab National Bank has extended the purview of KCC scheme by providing an additional limit up to 25 per cent of the eligible limit (including production and consumption loans) under KCC scheme or Rs. 50,000/-, whichever is lower.

d) Apart from providing financial counseling, Bank of India has also posted technical officers at rural and semi-urban branches to provide technical advice to the farmers to mitigate production risks. The bank has established a "Rudseti" type training institute at Bhopal to provide training for entrepreneurs as well as farmers for skill up-gradation and handholding to ensure sustainable livelihood.

e) In order to expand credit deployment and contribute to rural development without incurring higher transaction cost, banks have taken an initiative for purveying rural credit in association with the post offices. The formalities of the scheme are reportedly being worked out in consultation with the Indian Banks' Association and the Department of Post, Maharashtra Circle. This model, if proved successful, can be extended to other parts of the country for achieving financial inclusion.

4.3.2. The above examples are only representative ones and many such schemes are being implemented by other commercial banks to help the farmers. Thus, the commercial banks have not only conceived schemes on the basis of Reserve Bank's guidelines, but also took initiatives on their own to make a significant positive difference in the lives of farmers.

Steps taken by insurance companies

4.4.1. While availability of credit encourages production and creation of assets, insurance provides cover against the risk of loss of produce or assets or health of the borrower and his family members. Thus, availability of insurance products goes a long way in creating a sense of security amongst the farmers. The insurance facilities available at present to the farmers may broadly be divided into four categories:

- a) Crop insurance;
- b) Farm Income insurance;
- c) Weather insurance;
- d) Asset insurance; and
- e) Life and Health insurance.

Crop Insurance

4.4.2 Crop Insurance in India under NAIS is administered by AICIL. The Scheme was introduced from the Rabi season in 1999-2000 by expanding the scope and content of the earlier CCIS. It is primarily based on area approach and covers all farmers, compulsory for farmers borrowing from the banking system and - on voluntary basis in respect of non-borrowing farmers. At present, it covers 13 crops and is implemented in 23 states and two Union Territories. NAIS envisages area approach for wide-spread calamities and individual approach for localized calamities such as hailstorm, landslide and flash floods (the latter is to be on an experimental basis). Each participating state/UT was to bring down the unit of insurance to village panchayat. However, due to financial and infrastructural constraints, this could not be possible till Kharif 2006. The sum insured for the borrowing farmers is the amount of loan availed. This can be increased up to value of guaranteed yield and further up to 150 per cent of the average yield. For non-borrowing farmers, the sum insured is value of guaranteed yield, which can be extended up to 150 per cent of the average yield. Premium rates vary between 1.5% and 3.5% depending on the type of crop insured. The premium in case of small and marginal farmers is subsidized by 10 per cent, which is shared equally by the Central and the State/UT governments. Three levels of indemnity for low-risk, medium-risk and high-risk areas are available for different crops. Further, the scheme envisages sharing of risk by the Central and State/ UT governments as per pre-defined formula. The scheme for Rabi season of 2005-06 covered about 18 million farmers (source: AICIL) and thus, has become the largest crop insurance programme in the world. AICIL has, as on December 31, 2005, settled claims amounting to Rs.5917 crore.

4.4.3. A study undertaken by NABARD in eight Districts in Chattisgarh in the year 2005, on implementation of NAIS revealed the following.

- a) The scheme enabled the farmers to take risks in changing cropping patterns.

- b) Due to the compensation available under the scheme, farmers could repay their bank loans resulting in improved recovery.
- c) As very few non-borrowing farmers insure their crops, most of such farmers do not benefit from the scheme.
- d) Due to delayed/inappropriate crop cutting experiments/declaration of annawari, due compensation from the scheme was not available to the farmers.
- e) The method of assessment of crop yield by the insurance companies i.e. average of last three years' yield, was considered inadequate, resulting in farmers getting less amount of compensation.
- f) Despite the service charges given to the banks by the AICI and other insurance companies, bankers have not been active in selling the product to non-borrowing farmers as it increases their paper work.
- g) The scheme does not cover a substantial number of farmers (only about 150 lakh farmers are covered every year).

4.4.4 The Government of India had set up a Working Group to examine various aspects related to crop insurance. The Working Group in its report has suggested several refinements, some of which are indicated below.

- a) Insurance unit should be reduced to the level of village panchayat for major crops. To counter scope for possible interference and manipulation in the conduct of crop cutting experiments (CCEs), certain checks and balances have been suggested. The costs of CCEs are shared by the Government of India and State in equal proportion. States can use existing manpower/re-deploy surplus manpower of other departments or out-source manpower for additional CCEs.
- b) Guaranteed yield should be based on average of the best five out of the preceding seven years, as it is more appropriate.
- c) Indemnity levels should be 90% for low risk areas/crops and 80% for others.
- d) Settlement of insurance claim must be made mandatorily be done before the start of the next crop season.

The report of the Working Group is under the consideration of the Government of India. Apart from implementing NAIS, the AICI has introduced the following other insurance schemes.

Farm Income Insurance Scheme (FIIS)

4.4.5. Apart from the above scheme, which protects farmers against only yield fluctuations, the AICIL has introduced Farm Income Insurance Scheme (FIIS) during Rabi season 2003-04 on a pilot basis.

- a) This Farm Income Insurance Scheme (FIIS) scheme has been designed to take care of variability in both yield and market price. However, this scheme has been shelved, because in its present form it overlaps with the MSP policy of the government.
- b) The objective of FIIS is to provide financial support to farmers in the event of loss in income from adverse incidence of crop yield (on account of natural calamities, pests and diseases) and market price fluctuations. The Scheme also aims to encourage farmers to adopt prudent and progressive farming

practices, enhance food and livelihood securities of the farming community and stabilise farm incomes, particularly in disaster years.

Weather Insurance

4.4.6 Weather Insurance is a relatively new concept. Yet, it has assumed importance in the Indian context because weather, particularly rainfall, has an overriding influence on productivity of crops. The basis of weather insurance is the estimation of percentage deviation in crop output due to the deviations in weather conditions. This estimate is thereafter linked with the financial losses suffered by farmers and indemnities payable. The ICICI-Lombard General Insurance Company Ltd. is the first insurance company to introduce a rainfall insurance based on 'composite rainfall index' in 2003. The rainfall index insurance and other weather-based insurance schemes have been extended to several crops and areas beginning with Kharif 2004 season. Similarly, IFFCO-Tokio General Insurance Company has come up with their rainfall insurance called "Baarish Bima" since 2004. The AICIL also launched "Varsha Bima" in 2004 with different options viz. seasonal rainfall insurance, sowing failure insurance, rainfall distribution insurance and catastrophe option for the farming community. Varsha Bima has been fine-tuned and extended to 150 locations in 15 states during Kharif 2006.

Asset, Live stock, etc. Insurance

4.4.7. Asset insurance is provided in India by the general insurance companies in both public and private sectors.

a) **Asset insurance** is provided in India by the general insurance companies in both public and private sectors. Asset insurance concentrates on insuring the productive assets of the farmers like livestock, stock of grains in warehouses (Khalihan) or otherwise, fish in ponds, animal carts, failed wells, dwelling units, pump sets, etc.(Kisan Package Policy of the Oriental Insurance Co. Ltd.).

b) **Cattle & Livestock Insurance** policies are offered by general (non-Life) insurance companies covering all indigenous/cross breed/ exotic animals in the prescribed age groups, duly fixing the value and certifying the health of the proposed animal by a qualified veterinary doctor. Animal owners/private dairies/cooperative dairies/ NDDDB-owned dairies are eligible to take out insurance. The risks covered are:

i) Death due to accidents including fire, lightning, flood and cyclone or disease contracted during the currency of the policy period.

ii) Permanent total disability of the cattle due to total incapacity to conceive or yield milk to be covered by paying extra premium.

c) **Poultry Insurance** policies are offered by insurance companies covering layer birds and hatchery birds in a poultry farm in the age group of 1 day old to 72 weeks and broilers in the age group of 1 day to 8 weeks. Ducks and Quails are also insured under the policy. Poultry farmers/financing bank are eligible to insure the birds. Policy provides indemnity against death of birds due to fire, lightning, flood, cyclone, strike, riot, civil commotion, terrorism, earthquake and disease contracted or occurred during the policy period (a few specified disease are, however, excluded and can be covered subject to vaccination).

d) **Agricultural Pump Set Insurance** policies are offered by insurance companies covering all kinds of pump sets like centrifugal, jet and submersible (both electrical and diesel) up to 30 HP of approved makes. Owners of pump sets or financing banks and manufacturers of pump sets can insure under Pump Set Package Policy. The risks covered are -

- Fire and lightning;
- Theft/burglary;
- Mechanical/electrical breakdown;
- Terrorist attacks; and
- Flood.

4.4.8 Life insurance is provided in India by the life insurance companies (both private and public sectors) and health insurance is provided by the general insurance companies. Life insurance primarily endeavours to compensate a farmer for possible loss of life, while health insurance is primarily targeted towards the medical expenses of the farmer and/or his dependents. Personal accident cover is another popular insurance option. In some cases of health insurance, as in the case of Universal Health Insurance Scheme of the Oriental Insurance Company Ltd., Central Government provides premium subsidy. Payment of service tax by these agencies has also been exempted.

4.4.9 The group recommends that a long term approach to rural and farm insurance with customized, flexible and integrated risk products covering life, health and non-life assets and even the spurious seeds/pesticides is required to incentivise the small and marginal farmers to undertake risks in commercial farming. A new integrated micro-insurance product to cover of the small/marginal farmers at reasonable costs could be devised if necessary, by changing the legal requirement and the Group Premia approach on a village-wise or panchayat-wise basis could be introduced. On the analogy of some banks providing insurance cover to the prospective depositors, they may consider providing insurance cover to small borrowers including small and marginal farmers in group insurance basis. This may even serve, on occasions, as default guarantee.

Credit Guarantee

4.5.1 In the backdrop of unpredictability of Indian agriculture, the concept of hedging the risk on agri-loans assumes great importance. A safety net in the form of credit guarantee for the credit institutions is one such method. Credit Guarantee functions were in vogue in India for a fairly long time. Historically, the DICGC, a wholly owned subsidiary of Reserve Bank, was administering the following three schemes:

A.	Small Loans Guarantee Scheme, 1971
B.	Small Loans (SSI) Guarantee Scheme, 1981
C.	Small Loans (Co-operative Banks) Guarantee Scheme 1984

4.5.2 The Small Loans Guarantee Scheme, 1971 had a provision for credit guarantee in respect of credit given to farmers and agriculturists (under direct finance to agriculture) for raising crops, developmental activities, conversion of crop loans up to a maximum of 3 conversions and also allied activities like pisciculture, sericulture, animal husbandry, poultry and dairy farming. Even indirect finance

to agriculture as per Reserve Bank's guidelines on priority sector lending, barring advances for construction and running of cold storage and custom-built units, were covered under the scheme. Commercial Banks including RRBs were eligible to participate. Guarantee cover was restricted to 50% of the amount of default or a fixed amount (ranging from Rs 10,000/- to Rs 60,000/- depending on the activity), whichever was less.

4.5.3 The schemes were voluntary for the credit institution and operated on an automatic coverage basis under which all eligible advances were automatically covered for a uniform rate of guarantee fee irrespective of the degree of risks involved, by entering into specific agreements with the Corporation for each scheme separately. The Small Loans Guarantee Scheme, 1971 and the Small Loan (SSI) Guarantee Scheme, 1981 accounted for 99% of the total guaranteed advances.

4.5.4 The Central Board of the Reserve Bank, while reviewing the working of the Corporation for 1988-89, desired that the schemes be reviewed. Subsequently, based on a comprehensive review made, Reserve Bank had proposed to Government of India in April 1990, shedding of the guarantee schemes as they had, by and large, accomplished the objectives for which they had been formulated and were no longer viable. The Board of the Corporation, in December 1990, decided in principle to terminate the schemes with effect from the close of business on March 31, 1991. However, as the Central Board of Direct Taxes (CBDT) had not agreed to extend tax concessions to the transfers to be made by the credit institutions to the Risk Funds proposed to be created by them in lieu of the Credit Guarantee Schemes of the Corporation, the Board of the Corporation was continuing the schemes on an annual basis even thereafter.

4.5.5 The Corporation sought to maintain the viability of the schemes by varying (a) the guarantee fee rate (b) guarantee cover percentage and (c) the monetary ceiling on the Corporation's claim liability. In the span of three decades the Corporation resorted to such changes only on three occasions.

4.5.6 It may be seen from the table on page No.34 (next page) that the value of claims received under the schemes fast outpaced the amount of guarantee fee.

Year	(Rs. in crore)		
	Guarantee Fee Receipts	Guarantee Claims Received	Gap
1982	57.67	34.11	23.56
1983	71.17	60.42	10.75
1984	87.91	115.69	-27.78
1985	105.66	186.9	-81.24
1986	127.25	245.86	-118.61
1987	145.17	386.95	-241.78
1988-89	191.89	580.97	-389.08
1989-90	593.83	548.33	45.5
1990-91	524.72	748.76	-224.04
1991-92	565.88	627.23	-61.35
1992-93	702.78	1143.27	-440.49
1993-94	846.09	1490.76	-644.67
1994-95	829.13	1726.82	-897.69
1995-96	704.64	2365.23	-1660.6
1996-97	564.02	2112.37	-1548.4
1997-98	164.91	497.26	-332.35
1998-99	123.23	252.19	-128.96
1999-2000	21.99	245.49	-223.5
2000-01	0.07	36.06	-35.99
2001-02	0.02	1.24	-1.22
2002-03	0.21	0.26	-0.05
2003-04	0	0	0
2004-05	0	0	0
2005-06	0	0	0

4.5.7 The increasing trend in claims reflected the deficiencies in the quality of loan portfolio of credit institutions. The automatic access to guarantee cover might have led to laxity on the part of the credit institutions in proper appraisal, effective monitoring and adequate recovery efforts.

4.5.8 On account of the short fall in funds for meeting the guarantee claims the Corporation was constrained to draw down on the Deposit Insurance Fund. This placed a strain on that fund too. The amount due to the Deposit Insurance Fund was as high as Rs.1913.91 crore as on 31 March 1999. As on March 31, 2006, the Credit Guarantee Fund has, after paying back to the insurance fund, a surplus of Rs 344.72 crore.

Employment Generation Schemes of Government of India

4.6.1 In order to improve the financial condition of the rural population, significant portion of which comes from agricultural background, the Government has been administering a few employment generation schemes. Notable among them is Swarnjayanti Gram Swarozgar Yojana (SGSY).

4.6.2 Government of India restructured the erstwhile Integrated Rural Development Programme (IRDP) and its allied schemes viz. Training of Rural Youth for self Employment (TRYSEM), Development of Women and Children in Rural Areas (DWCRA), Supply of improved Tool kits to Rural Artisans (SITRA), Ganga Kalyan Yojana (GKY) and Million Wells Scheme (MWS) and subsumed them into a single holistic programme known as Swarnjayanti Gram Swarozgar Yojana (SGSY) with effect from April 1, 1999. This

was done because many schemes with similar objectives were seen as hindrances for successful achievement of the objective of employment generation in the rural areas.

4.6.3 SGSY covers all aspects of self employment such as organization of poor into self-help groups, training, credit, technology, infrastructure and marketing. The scheme is funded on 75:25 basis by the Centre and States, and is implemented by District Rural Development Agencies (DRDAs) through Panchayat Samitis. The scheme aims at establishing a large number of micro enterprises in the rural areas of the country. The objective of the scheme is to bring every assisted family above the poverty line by ensuring appreciable sustained level of income over a period of time by providing them income-generating assets through a mix of bank credit and government subsidy.

4.6.4 The achievement vis-à-vis the targets under the SGSY scheme for the last three years is as under:

(Amts. Rs. in Crore)	Target	Total Loans Disbursed			Break up of loans disbursed-physical target		
		Year	Amount	No. of persons assisted	Amount	% of achievement	No of SC/ST assisted (Sub-Target 50%)
2004	1408.55	991062	840.81	59.69	256716 (25.90)	276443 (27.89)	8623 (0.87)
2005	1593.39	1084749	958.13	60.13	285395 (26.30)	338391 (31.19)	10126 (0.93)
2006	1669.63	1207078	1125.42	67.41	426000 (35.29)	608756 (50.43)	20788 (1.72)

SOURCE: Data as reported by Scheduled Commercial Banks

Note: Figures in parentheses indicate percentage achievement

Thus although the achievement under the existing SGSY scheme has been below target, it has been improving gradually.

4.6.5 A new concept that has taken shape recently is the employment guarantee in the rural areas. The first phase of the National Rural Employment Guarantee Act, which has come into force in 200 districts of the country since February 02, 2006, envisages livelihood security in rural areas by providing at least 100 days of guaranteed employment in a financial year to one member in every household, whose adult members volunteer to do unskilled manual work. To ensure that beneficiaries are given full payment of the wages, the operational guidelines suggest that wage payment may also be effected through banks and post office network to ensure transparency. Thus, this scheme endeavours to supplement the farm income of the rural households through off-farm employment, albeit for a part of the year.

Commodity Exchanges for risk mitigation

4.7.1 Given the productivity and production of agricultural produce, the major determinant of the farmer's income is the price of his produce. The present market structure does not provide him with the

required price assurance and very often he ends up getting an unremunerative price. Commodity futures market is a step in the right direction for providing some respite in this regard. In the last couple of years, the Ministry of Consumer Affairs, Government of India, and the Forward Markets Commission, which is also the immediate regulator, have opened the gates for futures trading in over 120 commodities with the basic objective of presenting to the producers, suppliers and end-users an opportunity to hedge their price risk. NCDEX is the implementing authority for this. The farmers can make use of commodity futures exchanges like NCDEX at three stages of their income cycle, viz.

- a) Decision-making stage – Conventionally, the farmers sow a crop based on information on the level of prices of crops in the last season. This practice often leads to over or under supply situation, where too many farmers end up reducing or increasing the area under the same crop. Instead, a farmer can decide on the crop to be sown, based on the information in respect of future prices of alternative crops. Such information is made available by NCDEX via print or electronic media or price tickers at rural bank branches, warehouses, information kiosks.
- b) Pre-harvest stage – Once the crop has been decided, the farmer has a choice of selling the crop forward in the exchange so that he is assured of a given price at the time of harvest. NCDEX is working towards providing an integrated solution in this regard whereby the co-operatives or NGOs could act as aggregators by adding up the quantities to be hedged, while banks provide pre-harvest finance (knowing that the farmer's income is protected) and the insurance companies cover the risk pertaining to his harvest. Hence, an insured product, for which bank has provided finance, is sold forward on futures market.
- c) Post-harvest stage – Over-supply conditions at the post harvest stage often dampens the price of agricultural commodities. In such situations, a farmer can take a call on when to sell by looking at the futures prices in the commodity exchanges. NCDEX has provided an integrated solution whereby a farmer can take his produce to a warehouse, get it certified and sell it forward in the exchange. The warehouse receipt forms the basis for bank finance to help him tide over the liquidity squeeze till the futures contract matures.

4.7.2 Commodity futures have been in vogue in India for some time now. However, the small and marginal farmers are still not in a position to reap the benefits. In spite of efforts put in by various agencies like NCDEX, access to price and other relevant information is limited. The trading lots for commodity futures are often much bigger than what is produced by a small farmer. Price volatility is the basis through which hedger/speculator can operate. From the total volume transacted, around one per cent involves physical transaction of commodities. A marginal/small farmer cannot operate in this market. **Therefore, the role of an aggregator assumes a lot of importance. It has been felt that the banks are the best suited to assume this role. But this needs legislative changes in the Banking Regulation Act, 1949. The group suggests that action in this regard may be taken expeditiously.**

4.7.3 The Working Group on Warehouse Receipts and Commodity Futures, appointed by the Reserve Bank, recommended creation of an umbrella structure of Closed User Group (CUG) for everyone engaged in commodities business including commodity exchanges, APMCs, warehouses, exporters, importers, etc. The CUG has been envisaged as an electronic platform that would allow straight-through

processing for everyone connected with the commodities. It has been felt that the CUG would provide a near perfect market place for conducting business on the basis of the rules formulated by the members, whose commercial independence will not be compromised. The proposed CUG will not only obviate the immediate need for time consuming legislative changes, but it will also encourage dematerialisation of warehouse receipts, provide a platform for spot trading, reduce transaction time and cost, and lead to speedy and effective dispute realization. Further, it was felt that establishing and operating such a CUG would not be a problem in states that have adopted the Model APMC Act. Since the above model is designed with all kinds of participants in mind, the small farmers will not necessarily be in a disadvantaged position. The farmers may access the CUG platform, on-line, through their banks for loan against an electronic warehouse receipt. He may also sell the commodity spot or forward by going through one of the intermediaries. **The proposed system of CUG is expected to be both workable and effective. The group suggests speedy implementation of this suggestion.**

4.7.4 In addition to the above, the following arrangement is expected to provide some succour to the hapless farmers.

a) While the present system allows the farmers to get a fixed price through futures trading, there is no mechanism by which the farmers can realize a price better than the contracted price if the market conditions are favourable. **Thus allowing options trading in commodity markets may enhance flexibility.**

b) The other area where there is a distortion is the mandatory sale of produce at the mandis. NCDEX is in the process of correcting this and has innovated a unique system of spot price determination and dissemination.

c) **The spread of price coupled with adequate infrastructural and other improvements in the form of warehousing facilities in the vicinity, low cost grading facilities, adequate and timely credit flow for inputs and crop insurance against the vagaries of nature are important. To ensure success, it must be ensured that a farmer is able to sell crops from his village itself without the need for transporting his produce to faraway places.**

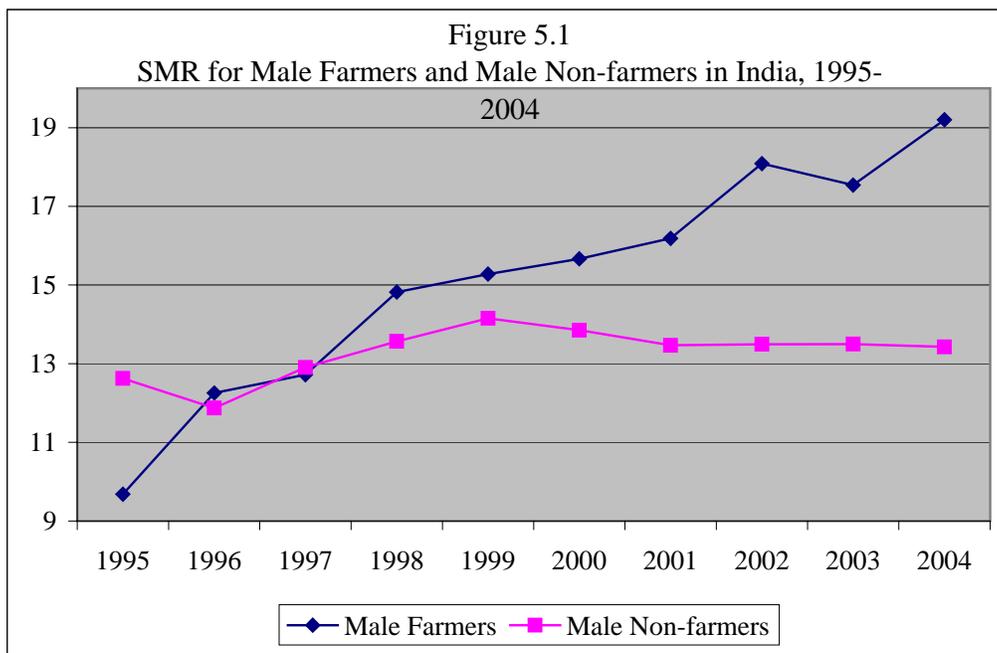
4.7.5 The above method of price and market risk mitigation has tremendous potential to ensure that the value-chain is compressed and the farmers get a higher price without stoking inflationary pressures.

Section V

Analysis of Issues and Factors Involved

5.1 This section analyses the various factors leading to agrarian distress. It also develops a matrix based on both supply and demand factors.

5.2 The current agrarian distress has come to the forefront because of a large number of farmers' suicides. Between 1995 and 2004, the NCRB data for India indicate 1,56,562 farmer suicide deaths, of which 83 per cent are males. The SMR, which denotes suicide deaths for 1,00,000 persons, nearly doubled for male farmers from 9.7 in 1995 to 19.2 in 2004, while it SMR increased from 12.6 in 1995 to 14.2 in 1999 for male non-farmers, but declined thereafter and stood at 13.4 in 2004 (Figure 1). In 2004, the states with SMR for male farmers higher than the national average were Kerala (183.0), Maharashtra (57.2), Delhi (49.4), Andhra Pradesh (44.5), Tamil Nadu (43.7), Sikkim (40.5), Karnataka (35.4), Goa (32.1) and undivided Madhya Pradesh (27.7)



5.3 Suicide is a complex interplay of multiple factors. Analytically, the factors can be grouped either in the neurobiological or in the socio-economic domain. The former are predisposing factors in the nature of the person, whereas the latter are the precipitating ones. With regard to farmers' suicides, one has to delve into the state of affairs in agriculture. Suicide being a rare phenomenon, relatively higher and escalating level of farmers' suicides is symptomatic of an agrarian crisis. The reasons for the crisis are largely the systemic risk (faced by a large number of households), and to some extent idiosyncratic risk (specific to the particular household). In fact, various risk factors may reinforce and feed into each other. Some of the risk factors are as follows.

Inadequate farm income:

5.4 The 59th round of NSS, 2003 indicates that in 2002-03, the average return from cultivation per hectare in India amounted to Rs.6756/- in Kharif and Rs.9290 in Rabi. Of the total farmer households, 86 per cent were with an average land size of 1.2 hectares and 62 per cent with an average land size of 0.9 hectare cultivated during Kharif and Rabi seasons, respectively. Paid out expenses as a percentage of value of output is about 44 per cent in Kharif and 42 per cent in Rabi. This is likely to be higher if one includes imputed family labour or excludes output used for domestic consumption. About 40 per cent of farmer households do not like farming and more than half of this do not consider it a profitable economic activity. Distribution of farmer households by size of land possessed suggests that a little more than one per cent are near-landless (less than 0.01 hectare), 64 per cent are marginal (0.01-1.00 hectare), 18 per cent are small (1.01-2.00 hectares), 11 per cent are semi-medium (2.01-4.00 hectares), 5 per cent are medium (4.01-10 hectares) and the remaining one per cent were large (more than 10.00 hectares). The field observations also indicate that the returns from agriculture for small farmers and to some extent for semi-medium farmers, particularly in unirrigated areas, are not sufficient to take them above the poverty line even under normal circumstances. The situation of the small/marginal farmers, tenant farmers (who pay rent for leased-in land) and the landless agricultural labourers (who depend on farm work for their wage income) is worse.

Limited non-farm opportunities:

5.5 As per 2001 census, 73 per cent of total workers in rural India are involved in agriculture either as cultivators or agricultural labourers. The 59th round NSS indicates that for all farmer-households (all those who possess land), cultivation accounts for 74 per cent of their returns (value of output minus paid out expenses). Farm animals contribute 7 per cent and the remaining 19 per cent is non-farm income. Nearly 36 per cent of farmer-households had their principal source of income outside of agriculture. This indicates that non-agricultural employment opportunities are limited. **Given low returns on agriculture, any intervention in the field of agriculture will have to include a large non-agricultural component into it. Such non-farm activities need to be seen as complementary to the farm activities without any apparent conflict between them. Agro-based industries and other gainful employment opportunities should be enhanced. The agro industries should be based on the current production patterns of the region. It can also be related to manufacture of compost, bio-fertilizers and bio-pesticides. The secret of amelioration of farmers' distress may well lie in the non-farm sector.**

5.6 At least 65 per cent of the farmers have such marginal holdings that in spite of the best efforts they cannot become viable and sustain their families. **These farmers must either be empowered with alternative skills to make them capable of moving out of farm sector or be enabled to become part-time farmers.** Further elaboration of this aspect has been made in the next section of this report that attempts to look beyond credit related issues.

Increasing input costs:

5.7 The farmer is increasingly becoming dependent on the market for inputs like fertilizers, insecticides and even seed. This not only increases costs, but the proportionate increase in costs goes much higher than the proportionate increase in returns. In such circumstances, a crop loss would mean a greater economic stress. Conventionally, the farmers have been using their own seeds, but now they have to be dependent on the market. Once fertilizer is used, it has to be used continuously, because withdrawal has negative effects on yields. Continuous use of pesticides could lead to the pests developing immunity, and hence, requirement of higher and higher dosages have to be applied. There is also a shift from household labour to wage labour, thereby increasing paid out costs. All these make cultivation more and more costly. **Appropriate institutions to propagate cultivation practices that increase the value of produce cost-effectively, should be encouraged.**

Availability of quality seeds:

5.8 With a shift from own seeds to hybrid seeds, and now to genetically modified seeds *Bacillus thuringiensis* (Bt) cotton, the farmer has to depend on the market. There is a high royalty paid on Bt cotton. The price of Bt cotton seed was four times higher than normal hybrid varieties of seeds. Even after court order not to charge royalty more than what is charged in the US, the price still remains nearly thrice the price of home-retained hybrid seeds. Surprisingly, now the instructions on the packets recommend increased intensity of seed use (reduced spacing) and it is not certain whether this is an outcome of trials or another method of increasing supplier-induced demand. The available seeds (hybrid as well as Bt cotton seeds), guarantee a germination of 65 per cent only. To address this problem, farmers end up buying nearly two packets for an acre. It is not clear how seeds rejected under qualifying parameters are ejected out of the supply chain. One of the major problems that farmers told the committee members during their field visits was that seeds were not available in adequate quantities and in a timely manner. Instances where seed sown led to healthy growth of the plants but did not yield any produce lead to a suspicion that genetically modified terminator seeds were being sold under cover.

Supplier-induced demand in input market:

5.9 On the supply side, the latest technology has made the farmers increasingly dependent on unregulated private suppliers of inputs. There are instances where during deficient rain, farmers (entire villages) have gone in for a second/third sowing leading to very low returns. Traditionally, a farmer knows that a second or third sowing will be giving much lower yields, but they are made to believe that they will get higher yields with new seeds. For instance, when seeds are sold, they refer to a particular yield under conditioned trials, which may not be possible to replicate by farmers. Similarly, the claim for a particular pesticide may only be for reducing the pest attack and because of this some positive impact on yield may be there, but input dealers often emphasize on the increase in yield. **There is no remedy available at present for the farmers from the spurious inputs supplied to them. The increasing reliance on an unregulated private input market has taken the form of supplier-induced demand. It is; therefore, felt that some legislative changes may be considered to ensure proper quality of seeds/inputs.**

Increasing pesticides usage:

5.10 As mentioned earlier, with continuous use of pesticides under Integrated Pests Management (IPM), can develop resistance and even immunity. Besides, it will also kill the farm friendly organisms. Use of pesticides also has health hazards, the most severe form being poisoning (accidental or intentional). Its cost implication needs to be worked out. Deliberate consumption with the intention to commit suicide, is an important associated risk on account of easy accessibility of highly toxic elements. Recent research also points out that closeness to organ phosphorous poisons can affect the central nervous system, leading to depression. This indicated that **pesticide is not only lethal poison for committing suicide, but also has a causal dimension. Limiting the availability of a highly toxic element, quick access to public health care including counselling in times of distress could be of considerable help in saving lives. This, however, is not going to reduce distress *per se*.**

De-skilling:

5.11 With changing technology towards input-intensive cultivation, the farmers' social capital of knowledge in cultivation gathered over centuries is rendered redundant. The farmer, has always, been a learner and in the current context has to rely on the input dealer, who very often misleads him in order to sell the pesticide or other inputs that are in his stock, rather than rendering the right advice.

Inadequacy of institutional extension service and research:

5.12 Increasing reliance on the input dealer for advice is a clear indication of the non-availability/inadequacy of extension service. This has given rise in rural areas to a situation of supplier-induced demand for inputs. As a result, farmers end up borrowing more for buying costly inputs, either unnecessary, or in proportions/combinations, which are not optimal. Discussions with farmers during field visits by the committee members pointed out the virtual absence of any extension service. In a few cases, the concerned officials are entrusted with other work (both by the governments and banks). In the absence of appropriate extension service, the link between extension service and field oriented research is not possible. Even where it is possible, the interaction has, by and large, remained uni-directional from research under controlled conditions to farmers' service, while the feedback (considering the constraints at the ground level for further experimentation) is somewhat missing. Our success in research leading to green revolution in wheat and rice, and subsequent success in oilseeds has almost bypassed the crops grown under arid and semi-arid conditions. **Agricultural counselling, besides credit counselling, can play a great role in reducing the reliance on the unregulated private input suppliers.**

Agricultural Service Centres

5.13 Proper agricultural counselling is a specialized job and the counsellors may themselves need proper training and sensitization. Experts from various fields like banking, insurance, and agriculture universities may be involved in revamping the system. Since, maintaining a permanent establishment may prove to be a drain on the resources of any bank, a few banks operating in an area may consider coming together to set up Agriculture Service Centres and use the services of retainers like retired bank/insurance officers, and agricultural graduates on retainer ship basis.

The services of the counsellors may be made available to the needy farmers, free of cost. Such counselling (financial and technical) may be provided at the bank's instance to its borrowers. In such cases, banks must put in place a proper system of monitoring the activities of such borrowers by expanding the role of field officers.

Appointment of agricultural graduates as Rural Development Officers (RDO) to help farmers give various counselling services, in every rural and semi-urban branch will pay in its own way.

5.14 In order to address the supply side, more centres in line with 'DCM- Hariyali' may be encouraged to be set up. These centres may act as one-point source for distribution of agricultural inputs of proven quality and also as a one-stop shop for sourcing the consumption needs of the farmers. By sourcing the supplies directly from the manufacturers, these centres can offer standard products at standard prices. They may also supply tractors on hire, threshers and other costly farm equipment to the farmers at a reasonable rent so as to reduce the capital cost for the farmers. By encouraging interaction amidst the user groups, such outlets can become key nodal points for dissemination of information on the availability and suitability of techniques/inputs. These centres may also arrange meetings between the farmers and agricultural experts from time to time at a nominal fee. Such outlets may be encouraged to be set up at all growth centres/mandi centres. Possible linkage with the banks for funding purchase of agricultural inputs and hiring services through the KCC mechanism needs to be explored. Private state-of-the-art markets catering to the high-end consumer markets that link up high value crop production by small farmers with processing, grading, packaging and supply to the consumer markets on one hand and integrating the quality supply of inputs, extension services and marketing can go a long way in improving the condition of the small farmers. Entrepreneurs may be encouraged to establish proper cold storage facilities with uninterrupted power supply within easy reach of the farmers. Further, the Lead Banks may be encouraged to set up farmers training centres on the lines of those set up by Punjab National Bank. Special emphasis may be placed on small dairy, poultry and other supplementary enterprises so that the incomes are enhanced leading to higher repayment capacity of the farmers.

Limited availability of water:

5.15 One major complaint that committee members heard while discussing with farmers relates to the non-availability of irrigation water. Demand for water under arid conditions apart, high value crops are also water-intensive. Search for water has led to private investments in the form of digging deeper and deeper bore wells, which have associated miseries of deeper indebtedness and receding water table, as is evident in Andhra Pradesh, Punjab, Haryana, Western Uttar Pradesh and Gujarat. Private investments are increasingly becoming uneconomic. The demand and use of water for domestic consumption (particularly, in urban areas) is also on the rise. This has an adverse impact on availability of irrigation water and consequently on the availability of water for agricultural purposes.

Output risk:

Crop loss (yield shock):

5.16 Conventionally yield shock has been associated with deluge or dearth of water. Extreme manifestation is in the form of floods and droughts. It can be observed in more subtle ways also in terms of less or inadequate amount of water after sowing/transplantation when the plants need water to grow or heavy rains when the crops are ready to be harvested. In addition, pest attack, fire and theft among others can also lead to crop loss. As stated earlier, spurious quality and unscientific usage of inputs also adversely affect the yield. Moreover, the latest technology has made the farmers increasingly dependent on unregulated private suppliers of inputs. To address the crop loss, a system of crop insurance is already in vogue. However, in practice, it has benefited only certain sections and certain crops. It is understood that some steps for modification of NAIS have already been initiated. **The comprehensive crop insurance schemes did not address the problems of individual farmers since the area for loss assessment was too widespread to compensate the individual farmer. While the farmers were made to pay premium on individual basis, there was mismatch between the unit of payment and the unit of risk settlement. This problem can be effectively addressed by investing heavily by developing infrastructure like weather stations. Since this may be an expensive proposition, as an interim measure, the group recommends that the assessment of loss can be made at the village panchayat level. Further, there is an increasing need to develop customized, flexible and integrated risk products covering among other things the risk arising out of spurious seeds/pesticides. This may incentivise the small and marginal farmers to undertake risks in commercial farming. There is a need to educate farmers about the need for insurance so that reliance on state for normal risks of agricultural operations is reduced and limited to the subsidy payout on the crop insurance. Further, the insurance premium may not be subject to service tax.**

Market uncertainties:

5.17.1 Price shock: An unremunerative price for produce results in a dent in the farmer's income. It is generally understood that prices are low when yields are high and vice versa, but this is true at an aggregate level. It is possible that a particular region may witness yield and price shocks simultaneously. Low-yield producing regions will also be at a disadvantage and more so when the produce is for the market. With the integration of the domestic market to international markets, prices will depend on global supply and demand scenario leading to increased volatility.

5.17.2 With opening up of the economy, the Indian farmer is exposed to the volatility of international prices. The irony of the situation is that some of these price risks are because of market distortions through subsidies by developed countries for their produce coupled with the absence of import tariffs in India (for example in cotton). At a critical juncture when there is a greater need of price-stabilization, the monopoly cotton procurement scheme (MCPS) of Maharashtra government has become non-functional. Disbanding of this scheme in 2005-06 has led to a reduction of Rs.500/- per quintal in the advance additional price that has acted in recent years as a cushion against the higher costs in the state. The Commission for Agricultural Costs and Prices estimates the cost of production for cotton in Maharashtra at Rs.2303/- per quintal, but the all-India minimum support price for the long staple variety of fair average

quality is only Rs.1980/-. In contrast to the volatility in output prices with a mild declining trend, the input prices have been increasing.

5.17.3 Much of the price/income risk is due to the inefficiencies in the marketing structure. It is, therefore, felt that the state governments may create an enabling environment so that the existing farmers' co-operatives may be strengthened and involved in various post-harvest stages of marketing. Adopting contract farming may also help the farmers achieve economies of scale and get them assured and better price for their produce since it will reduce the number of intermediaries between the farmers and the consumers.

5.17.4(a) Any subsidy is likely to distort the markets. As such, the Group does not favour provision of any subsidy. If, however, subsidy is sought to be provided by the Government as a matter of public policy, direct subsidy to a target group of small and marginal farmers is preferred to the present system of uniform indirect subsidy, which tends to benefit the larger farmers more. In order to empower a small or marginal farmer with purchasing power and also to help him develop management acumen through flexibility, it is suggested that direct subsidy may be in the form of input subsidy. For input subsidy, it may be provided to the target group with 'input stamps' (instead of cash), which can be used for procuring the required inputs by the farmers. Though ease of operation recommends across the board subsidy, the above method of providing direct subsidy is recommended since, being an income support mechanism, this would not attract WTO provisions.

(b) Alternatively, a scheme involving back-ended interest rate subsidy through banks may be made available to the target group on prompt repayment of bank loans. This addresses the issue of 'moral hazard' of giving a dole in the form of 'input stamps'. Banks may associate themselves with schemes akin to the 'DCM-Hariyali' (referred to in paragraph 5.14 above). While the inputs and other services are purchased by the borrowers from these outlets on credit, subsidy may be credited directly to the borrower's account based on his repayment performance.

Household structure:

5.18 For the same absolute income, more number of members would reduce the per capita expenditure. Under son-preference syndrome (people going for a third child are likely to be those with two daughters), households with more members are also likely to be those with more female members. Besides, the social obligation and associated expenditure of households with more females (read daughters) would be different.

Additional household/consumption requirements:

5.19.1 In a good year (no major shocks on yields or prices) a semi-medium farmer is likely to be able to meet normal household expenses (food and clothing, among other essential expenditure). Additional expenditure in the form of health needs (more so for chronic cases and inpatient care), ward's education (particularly, beyond high school), social obligations (children's marriage and other life cycle functions) will further accentuate the state of inadequate income. Some of the other risk factors can be larger

number of family members and absence of assets. A study in western Vidarbha, comparing suicide households and non-suicide households, indicated the following.

- a) The farm family has relatively lower level of assets and inadequate access to basic amenities. For instance, a pair of bullocks, a productive and liquid asset, is owned by 43 per cent of suicide-case-households compared to 64 per cent of non-suicide (control) households.
- b) Average family size in suicide case households at 5.53 is greater than that of non-suicide control households at 5.08. The larger family has larger number of female members.
- c) The average annual value of produce per suicide case households at Rs.23 thousand is about 55 per cent of the average value of produce per non-suicide (control) households.
- d) More important, the former have an outstanding debt that is 3.5 times higher per household (Rs.38444/- compared to Rs.10910). Even after normalizing by family size and land size the outstanding debt in suicide case households is nearly three times higher.

5.19.2 The case-control analysis points to greater economic hardship among suicide case households. The risk factors are such that a control household or any other household in the village can be afflicted by this in the future.

Absence of assets (livestock):

5.20 Livestock is an important productive as well as liquid asset. Its absence/sale could be indicative of a distress that the household is in. Absence of bullocks also increases the cost of cultivation because the farmer will have to hire it and pay appropriate additional costs.

5.21 The above-mentioned risks, independently or in combination, will increase the need for credit. In such situations, non-availability of adequate credit is one of the most important risk factors.

Declining public investments:

5.22 Gross fixed capital formation in agriculture as a proportion of gross domestic product (GDP) declined from 3.1 per cent during 1980-85 (Sixth plan) to 1.6 per cent during 1997-2002 (Ninth plan). During the same period, gross fixed capital formation in agriculture as a proportion of total gross fixed capital formation declined from 13.1 per cent to 7.4 per cent, and proportion of plan expenditure towards agriculture and allied activities declined from 6.1 per cent to 4.5 per cent.

Credit scenario for farmers (NSS 59th round):

5.23 From the 'Situation Assessment Survey of Farmers (NSS 59th round, 2003) the source wise distribution of outstanding debt indicates that 58 per cent of it is from formal sources (Government 2.5 per cent, cooperatives 19.6 per cent and banks 35.6 per cent), more than one-fourth of the outstanding debt is from moneylenders, and the rest is from other informal sources. The purpose wise distribution indicates that nearly 58 per cent of outstanding debt is for agricultural purpose (31 per cent capital expenditure and 28 per cent current expenditure), 7 per cent for non-farm business and the remaining 35 per cent is for

consumption or other purposes. The incidence of indebtedness across size-class being 45.3 per cent for near-landless (<0.01 hectares), 44.4 per cent for lower marginal (0.01-0.40 hectares), 45.6 per cent for upper marginal (0.41-1.00 hectares), 51.0 per cent for small (1.01-2.00 hectares), 58.2 per cent for semi-medium (2.01-4.00 hectares), 65.1 per cent for medium (4.01-10 hectares) and 66.4 per cent for large (>10.00 hectares). This indicates a positive association between debt and farm size. Average outstanding debt per farmer household across size-class of landholding is near-landless: Rs.6121/-; lower marginal: Rs.6545/-; upper marginal: Rs.8623/-; small: Rs.13762/-; semi-medium: Rs.23456/-; medium: Rs.42532/-; and large: Rs.76232/-. The average outstanding debt across the castes/tribes stood at: Rs.5506/- for scheduled tribes; Rs.7167/- for scheduled castes; Rs.13489/- other backward castes; and at Rs.18118/- for others. Overall, there are wide inter-state variations ranging from Rs.72/- in Meghalaya to Rs.41576/- in Punjab.

Formal sources of credit:

5.24.1(a) For scheduled commercial banks, the trends in recent years are as under:

- The network of bank branches in rural areas is not expanding,
- As per BSR data, credit utilization in agriculture as a proportion of total credit utilization has been declining and stood at 11 per cent by March 2004,
- The number of agricultural loan accounts has been declining (reduced from a peak of 27.7 million in March 1992 to 20.3 million by March 2002 with a marginal increase to 21.3 million by March 2004),
- Agriculture credit utilization is shifting from rural to urban regions,
- Within agriculture the share of direct finance has been declining,
- Within direct finance, there is a shift towards high value crops,
- Default by members has led to credit lines in cooperative banks being choked,
- The outstanding debt from cooperative banks is likely to be older loans,
- The credit limits for meeting working capital are not commensurate with rising input costs, and
- It is difficult to prevent diversion of loans from productive purposes to consumption purposes.

(b) Some of these problems have been addressed by two committees recently (viz. Vyas committee and the Vaidyanathan committee on revival of rural cooperative credit institutions’).

5.24.2 For credit expansion through formal sources and improving the outreach to the small and marginal farmers and tenant farmers, the group emphasizes on the need for increasing banks’ outreach to rural areas by opening more rural branches or through mobile/satellite branches. This can be complemented by the role of the SHGs and JLGs. Bank credit may be channelled to the member-farmers through these groups and may be linked to the savings by the borrower-members. Services of post offices may also be utilized for channelling bank credit. This source, if developed with vision, has the potential to reduce the need to approach the private moneylenders, and to ameliorate the distress conditions to a great extent.

5.24.3 Although credit is a very important factor in distress amelioration, provision of more credit without proper evaluation of the credit needs and repaying capacity of the borrowers will only worsen the indebtedness situation in the farm sector. It also acts as a disincentive for the banks and financial institutions to provide the required credit. Further, requiring banks to charge interest at flat rates, irrespective of risk perceptions, is likely to act as a disincentive for the banks to

increase their lending to the sector. Therefore, the group recommends that banks may be permitted to provide agricultural credit at appropriate rates of interest on the basis of repaying capacity/incremental repaying capacity estimated to be generated out of the borrowed funds and availability of other risk mitigants, rather than only on security considerations.

5.24.4 The other two factors that seriously impinge on availability of credit to farmers are non-availability of land records - either due to some age-old practice of not handing over land-deeds to the owners, as prevalent in areas of *Laldora* lands, or due to non-recording of tenancy rights on agricultural land. Some legislation in this regard could be worth considering. Computerisation of land records is another aspect that the state governments may need to consider positively.

Informal sources of credit:

5.25.1 The NSS 59th round shows that nearly 61 per cent of the total outstanding debt from informal sources is from moneylenders. Reliance on informal sources in general and moneylenders in particular has a higher interest burden. More often than not, the moneylender and the input dealer are the dominant persons of the village/region and are politically influential. They could be the ones who have more land and benefited from public interventions whether in the form of land improvement or obtaining credit from formal institutions.

5.25.2 In order to protect the small and marginal farmers, tenant farmers and farm labourers from the moneylenders charging usurious rates of interest, it is felt that a mechanism may be evolved for their inclusion into the formal financial system. The administration and civil society have to come together for this. As stated in section I, a separate Technical Group has already been constituted by Reserve Bank of India to study the functioning of moneylenders and examine the linkages, if any, between money lending activities and formal credit channels. mechanisms to regulate private moneylenders. **The Group suggests enacting a 'Moneylenders Regulation Act' with the following provisions:**

- ❖ **Total liability of the borrower should not exceed double the amount borrowed.**
- ❖ **A ceiling on the rate of interest may be fixed say, at SBI's Benchmark Prime Lending Rate + 4 per cent.**
- ❖ **Court should have jurisdiction to scrap all residual liabilities with retrospective effect, if repayments have been made up to double or more than the amount borrowed.**
- ❖ **One residential house and land up to 5 acres should not be attached under any circumstances and should not be taken as collaterals.**
- ❖ **Land and residential house may be used only to assess the worth of the borrower and to assess reasonable credit needs of the person.**

5.26 The above discussion points to a number of risk factors (summarised in a matrix of issues in **Annex - III**). This calls for risk mitigation strategies to address inadequate income and crop loss, additional expenditure requirements and credit risk, among others.

A few more steps suggested towards addressing the issue:

5.27.1 The most important issue in the present context is to address credit risk. Some of the suggestions made by the group with regard to the sources are as follows:

a) **Given the various risks, the farmer can be pushed into a quagmire of indebtedness, which will create difficulties in repaying the loans leading to default. This will close future avenues from formal sources, pushing him to informal sources at a higher interest costs. Appropriate steps need to be taken to address this constraint at early stage. Financial and livelihood counselling that increases the viability of credit becomes relevant.**

b) **OTS schemes have so far brought succour to the farmers affected by acute distress. However, these schemes have primarily addressed the borrowers whose accounts were not regular at the time of the natural calamities. For accounts, which were standard, reschedulement/restructuring was the only available relief. This prevented these account holders from taking benefit of the OTS schemes. In reality, the conditions of these 'standard' account holders may not be much different from those who could take advantage of these schemes. The Group, therefore, recommends that OTS rules may be modified in such a manner that the 'standard' accounts, which were rescheduled/restructured on account of natural calamities, may also qualify for OTS. However, across the board waiver of loans is never a solution to the chronic problem of farmers' distress because it vitiates the repayment culture and spoils the mutual confidence between the borrowers and lenders. Further, the banks may be given certain discretion in dealing with cases of individual farmers, defaulting due to circumstances beyond their control, and offering limited OTS packages based on their past performance. However, in order to ensure transparency in this regard, banks may put in place a proper OTS policy approved by their Boards.**

c) **It may be pertinent to note in this context that there may not be any quick-fix solution to a problem as vast and complex as farmers' distress. 'Farmers' Distress' may be systemic or idiosyncratic in nature. While systemic distress affects a large number of farmers in an area, idiosyncratic 'distress' may relate to an individual farmer or a small number of farmers. Systemic distress is mostly the result of widespread natural calamities, while idiosyncratic distress, may be the result of factors affecting at the individual level like poor productivity of land, localized crop failure/pest attack, spurious seeds/inputs, sub-optimal use of inputs, social/domestic obligations (marriages, children's education, medical treatment etc.), failure/theft of the asset and conspicuous consumption. At times, it may be difficult to differentiate between systemic and idiosyncratic distress. Even during a general systemic distress, some farmers may experience distress due to reasons other than those causing systemic distress. Therefore, **relief measures to address the issue of distress will depend a lot on the ground level situation and would require all the agencies like insurance companies, Government and banks to work closely and play their part. After taking into account the relief provided by the Insurance companies and Governments (either central or state or both), the banks may address the residual distress of the farmers by adopting account specific approach. Instead of drawing the farmers into the condition of continuous indebtedness, efforts should be made to draw them out of it and help them break****

the vicious circle. Keeping this in view, the following trigger points are suggested to deal with systemic and idiosyncratic distress of the borrowers.

5.27.2 In order to deal with systemic distress, detailed guidelines issued by Reserve Bank on relief measures to be provided by banks in the areas affected by natural calamities are already in existence. Main features of these relief measures include rescheduling of existing loans and fresh finance. However, **consecutive reschedulements aggravate the distress conditions of the farmers. Therefore, the banks may be advised to adopt the following additional measures to deal with systemic distress:**

a) **The banks should be vigilant to recognize the first instance of non-wilful default (other than temporary delays in payment of interest/repayment of principal) by a borrower as a case of 'incipient distress' and be proactive in their approach to check further deterioration in the distress condition of the borrowers in the area of the systemic distress. The area and extent of systemic distress on account of natural calamities are declared by the District Consultative Committee (DCC) concerned. At the first year of default by the farmers due to systemic reasons, the banks may give an option to the defaulting farmers to choose either a package consisting of conversion/reschedulements, moratorium and fresh finance as per the Reserve Bank's guidelines on the subject or opt for an OTS (as per a transparent OTS policy approved by their boards) along with fresh finance. The banks may also provide, if need be, appropriate counselling to the borrowers.**

b) **If there is non-wilful default by the same borrowers in the subsequent year due to systemic reasons, banks may, after exhausting all other options of relief from the Insurance companies and Governments, treat these loan assets as loss assets, write them off their books, and invoke credit guarantee to make good the loss.**

c) **In order to make the above framework operational, a viable and self-sustaining Credit Guarantee Scheme administered by DICGC may be put in place. The features of the proposed scheme are given in the Annex – IV showing the trigger points for relief in V.**

5.27.3 Given its individualistic nature, idiosyncratic distress may need a differential treatment and may be primarily addressed through risk mitigation techniques. The main risks confronting the farmers facing idiosyncratic distress are credit, input and price risks. These may be addressed as under:

a) **In order to mitigate the credit risk, the banks may, in association with insurance companies, devise a default guarantee (insurance) scheme in the form of Group Insurance with reasonable/affordable premium. The borrowers may be encouraged to join the scheme on a voluntary basis. The banks may consider offering finer rates of interest to such insured borrowers as an incentive.**

b) **As regards input risk of the farmers arising out of crop loss due to non-availability/inadequate supply of water, electricity, proper quality seeds and any other reasons, for**

which the State Governments are responsible, State Governments concerned should be urged to provide the required relief by making good the loss.

c) For mitigating the price risk, the Group has already recommended speedy implementation of commodity exchanges (through banks as aggregators), commodity futures, options and contract farming. In addition to these, the insurance companies can also play a more active role by introducing new insurance products to address various other risks faced by the farmers.

5.28 The recommendations of the group may not be exhaustive, but they will surely help the farmers in distress if implemented with vision. However, there are still certain issues which go beyond the immediate causes of farmers' distress like credit, inputs, price and output, yet may be of immense importance in this context. The policy focus of finance led short-term solutions may not work in the long run. It is important to understand the changing face of Indian agriculture with all its forward and backward linkages. The next section of the report elaborates further on recommendations that look beyond credit.

Section VI

Alleviation of Rural Distress: Beyond Credit

6.1 The Indian economy is riddled with acutely skewed distribution of incomes. Development in general and gainful employment opportunities in particular, especially the high-end job opportunities, are bypassing the poorer segments of the society. Today the distress in agricultural and rural populations is manifesting in lack of built-up capacity that is necessary for availing of the opportunities generated in the process of development. The development process must address itself to the removal of these constraints in order to bring these large segments of the society into the process of mainstream development. It is to be realized that income problems of the farm families and rural households cannot be solved with the income from farm sector alone. The farm holdings are so small that in spite of best efforts and optimal utilization of available production and marketing technology, the income levels of small and marginal farmers and the farm labour dependent upon farm work alone cannot alleviate their distress and poverty. These populations have to be provided with supplementary sources of income, and small and marginal farmers have to convert into part time farmers. There is a limit to what can be done to improve the incomes of the farmers, especially of small and marginal farmers, from their land holdings.

6.2 Credit is only one facilitating input that improves productivity and production of farm enterprises. Credit is not a panacea for all the problems of the farm sector. Pouring of credit into the farm sector without considering its absorptive capacity will push the farmers into the vortex of irretrievable indebtedness and distress. Considering only the supply side and doubling or trebling of credit flow into farm sector without considering the demand side and developing its capacity to absorb this otherwise vital input, will fail to generate enough additional income and repaying capacity of the borrower farmers. This will further increase defaults on repayments and deepen indebtedness of the farmers. Farm size being very small, the volume of business remains very low, and as such in spite of best efforts, it cannot generate reasonable income for the farm family. The farmers will, therefore, have to meet their requirements of even food and clothing, not to speak of education of children, health and medical needs, emergencies, social obligations, farm investments, etc. from various sources. Informal sector offers easy access. The desperate borrower does not care at what cost the money is available to him and gets into an irretrievable debt trap. A stage comes when he obtains credit from formal sector for production purposes and diverts this money to repay the loan obtained from the informal sector. When credit obtained for productive purposes is diverted to nonproductive purposes, it results in defaults and indebtedness. The basic causal factor for this situation is the uneconomic land holdings of the small and marginal farmers.

6.3 For growth and development of farm sector and for improving the farm incomes and of the labour working on farms, the farm size must increase and become a viable business proposition. This can happen only when sizeable portion of farm population either moves out of this sector or becomes part-time farmers on small and medium size farms. In order that this happens, the rural population must be helped to build their capacity to move out and compete for off-farm employment opportunities. Further, these gainful employment opportunities, as far as possible must be made available in their proximity. The following steps are necessary for capacity building in the farm/rural sector of the country:

Education:

6.4 It is the primary responsibility of the state to build up child's ability and capacity according to his/her inherent personality traits. Unfortunately, it is the society that denies elementary facilities to some and overly provides to the others, depending upon the social and economic status of their parents, which creates inequities and unequal access to education and gainful employment opportunities. In the process, the poor and disadvantaged sections of the society, particularly in rural areas, suffer cumulatively through generations and the better-off sections move on higher and higher growth path of prosperity. These disparities lead to lop-sided development, and society suffers from acute skewedness in income distribution and deprivations for large majority of the population. As a result, development benefits in large part are being appropriated by a very small portion of the population.

6.5 Mere macro-level decisions to inject higher doses of credit into the agricultural and rural sector will not improve incomes and living conditions of the marginal and small farmers and alleviate their poverty and distress. It is the equalization of opportunities and access to education, health, life amenities and gainful employment opportunities that would take the significant portion of the society from the rural areas out of the quagmire of socio-economic inadequacies, wants and sufferings. Following points are suggested for special focus:

6.6 While the investment environment is sought to be further improved in the country, gainful employment opportunities are expected to increase substantially, especially when reform process is expected to improve FDI. It is, therefore, the human resource development that should receive added emphasis in order to enable the people to avail these new opportunities and openings. However, this thrust must consciously and in a calculated way tilt towards providing benefits in the agricultural/rural segments of the society. This can be achieved only when school level education improves in rural areas, where children of the poor rural population get their education.

6.7 Not more than 5 per cent of the rural families can afford to send their children out of villages to the urban centres for better education. These poor families cannot afford good schooling for their wards and have to depend upon government schools in or near their villages.

6.8 Thus, children of about 65 per cent of the rural population depend mainly on government schools, which impart an indifferent quality of education that does not enable the students either to compete for admission for higher education or equip them for any gainful employment.

6.9 It is only about twenty five per cent population of this country living in urban areas, which has access to rigorous education at school level for their children, while the children of 75 per cent of the population (65 per cent rural and 10 per cent urban) do not have such easy access. It is this disadvantaged population, which is soaring day-by-day and adding to the number of unemployed youth. These educationally lagging boys and girls have no skills to handle any well-paid job.

6.10 It is a shocking situation, for example, that in Punjab Agricultural University for over a decade, hardly any student from rural areas is finding admission into the College of Agriculture. Almost all students are from urban areas and from non-farming families. A survey by the Punjabi University, Patiala

has brought out that in that university campus, which has all the science, humanities, arts and technical subjects, only 6 per cent students are from rural areas. There is no reason to believe that situation would be different in other universities or institutions imparting technical education. This is so, because the entrance tests for admission to higher technical education courses are held in physical and biological sciences in English. There are not many higher secondary schools in villages that teach sciences, that too in English. Thus, it is primarily the creamy layers of population, which are appropriating the benefits of growth and development through better education, health and medical facilities.

6.11 Two-third of the farms in the country are of less than four hectare and two-thirds of these farms are less than one hectare. These farm families are in utter distress. Either they remain bottled up in the villages without much of gainful employment or they move to urban centres as a push effect of distress and create slums in the urban areas. At least, this rural population needs to be pulled out of the rural areas through building up their capacity that would enable them to be competitive in the job market. This can be done only through providing quality education in the rural areas at the same level as is available to the upper 25 per cent elite population of the country.

6.12 The country must, therefore, make adequate financial provisions for government schools, especially in the rural areas. While schools up to tenth class should be strengthened in general, higher secondary schools must receive particular attention in order to enable the students to compete effectively for admission to higher education courses, particularly in technical and professional subjects.

6.13 At all the government schools, particularly at the village schools, there should be a special thrust on Sciences and Mathematics. It should be obligatory on the part of managements of all the schools in the villages to provide for teaching of these subjects in English medium.

6.14 Financial provisions alone will not meet the objective. More important is the accountability of these schools and teachers. It is irony of fate that government employs the best teachers but does not enforce accountability. It is only with such financial provisions and accountability of the teachers that the disadvantaged population from the rural areas will find their due place in the development process of the country.

6.15 The country must, therefore, provide for adequate funds for all the rural government schools, for building up of their laboratories, libraries and other infrastructural facilities. The Eleventh Plan should also make substantive financial provisions in order to bridge this gap.

Health:

6.16 Apart from education, health of a person makes him or her capable of performance at any work, physical or mental. Even in the case of education, it is only the physically and mentally healthy person who can effectively absorb the knowledge and skills. Unfortunately, the rural poor suffer on this account and health services and medical care are eluding them. They cannot afford proper treatment when they fall sick. Whatever be the investments made so far, health and medical facilities are not available for majority of the farm families in the rural areas. The existing system of health care and health centres in the rural areas is not serving the purpose effectively. The system needs a complete overhaul. A two-pronged approach is necessary:

- a) **There is a need to provide for health insurance and medi-claim services. The medical insurance should be totally subsidised for the people living below poverty line in the rural areas and at least 50 per cent subsidy should be provided for all the agriculturist families operating up to two hectares of land and all the agricultural labour families in the rural areas.**
- b) **Multi-specialty Hospitals should be organized for every group of three blocks covering around 300 villages where there should be a community of at least 50 doctors (specialists from different disciplines).**
- c) **There should be enough number of Mobile Medical Vans, well equipped with essential medicines and attendant medical staff. Each van should cover two villages in one day and van should visit the villages on alternative days.**
- d) **This model will keep the doctors and paramedical staff satisfied with respect to their social life, education of their children and amenities of life. This will help check absenteeism and improve the availability of medicines and medical care to the rural communities.**

6.17 Thus healthy and appropriately trained rural youth will become competitive in the fast developing job market and will be able to move out of the farm sector. This will reduce the pressure of population on land and farm size will increase. The increasing and growing farm size will develop its absorptive capacity for productive credit. There will be lesser defaults and diversion of productive credit to non-productive credit will get reduced. Consequently, flow of credit to the farm sector will increase on its own strength.

Employment:

6.18 Present pattern of investment in industrial enterprises does not attract the rural youth for employment in the urban areas. The living conditions in the cities discourage them from taking up jobs that do not carry salaries/wages that can meet their board and lodging expenses and save something to take back to their families in the villages. Their farming operations also suffer in their absence. It is mostly the migratory labour coming from very poor areas that take up these jobs and create slums, where they live a miserable life. This pattern of employment is neither conducive to the clean and green development of the cities, nor for the healthy living conditions of the workers and employees.

6.19 If the incomes and living conditions of the small and marginal farm families are to be improved, they must be helped to become part-time farmers and off- farm employment opportunities must be created near at hand so that they work during day time in the industrial enterprises and return to their villages in the evening and tend to their farm work. Older members and female members, who may not be able to or prefer to work on off-farm jobs, may attend to routine farm operations and tend the animals.

6.20 This pattern can be achieved only if industries or their ancillaries, especially the ecologically friendly industries, are located in the rural areas or nearby thereto, where jobs are offered to the workers coming from farming and non-farming families. In order to encourage industries and their ancillaries to be located in rural areas and make them accountable for keeping pollution free environment and provide jobs to the local population, bold decisions have to be made in respect of:

- a) **exemption from all kinds of central and state taxes.**
- b) **capital subsidy on clean industrial enterprises**

- c) **compulsory state-of-the- art effluent treatment, if any**
- d) **Employment of at least 80 percent of the workers from rural areas.**

6.21 Provision should be made for capital subsidy for clean industries' development and scientific state-of-the art effluent treatment. These exemptions and subsidies will pay back in their own way by generating substantial employment opportunities and higher level of growth of the economy, and will make this growth and development perceptibly inclusive in nature. With this pattern of growth, government revenue will also improve through enhanced collections of sale tax on the goods produced. In case of VAT, only the initial industry level part will get exemption. VAT will apply at all other stages of the marketing channels.

6.22 Thus, support to quality education, health and medical services and gainful employment opportunities created at hand in the rural or nearby areas will go a long way in alleviating the distress of the agricultural and rural population and will put the economy on a higher growth path that will perceptibly be inclusive in its very nature. From the credit point of view, this will generate substantial flow of demand driven credit.

Anecdotal evidence of various countries

(A) Farm Subsidies

United States

The US farm programme advocates huge subsidies. These subsidies are limited to certain crops and activities. For example cotton, rice, corn, soya beans and wheat enjoy income subsidies that cost more than US \$ 20 billion in some areas whereas farmers who grow crops like fruits, nuts, vegetables, or rear livestock are ineligible for such subsidies. Fiscal conservatives and anti-poverty groups argue that subsidies help very few farmers and harm farmers in developing nations. Besides it is also argued that large number of farmers, because of availability of such subsidies, do little to manage the risks efficiently.

Usually subsidies are paid in three forms (a) difference between target price and market price; (b) Direct payment tied to past production; and (c) loan against loss when interest rates change.

European Union

The farmers in the European Union too receive income subsidies but the operational details and delivery mechanism vary across the countries within the European Union. The agriculture sector across the EU continues to be characterized by high levels of support. The farm subsidies in 2005 are estimated at USD 280 billion or EUR 225 billion. Total support to the agricultural sector, which combines support to producers, budgetary transfers to consumers and general services to agriculture, was equivalent to 1.1% of GDP in 2005 compared to 2.3% in 1986-88.

There has been a gradual shift away from most of the production and trade distorting policy instruments. Policy reform is changing the way in which support is provided to producers. The share of the most production and trade distorting forms of support - those linked to production or input use-declined from 91% of producer support in 1986-88 to 72% in 2004-05. A decrease in output-linked support is also shown by a significant reduction in the gap between domestic producer and border prices. In 1986-88, the average OECD producer price was 57% higher than the border price; by 2004-05 the gap had fallen to 27%. Reductions in these forms of support have been accompanied by increases in payments based on area or animal numbers or on historical entitlements, dampening the impact on farm receipts. Compliance conditions, especially environmental, are increasingly being attached to such payments. However, measures linked to production or input use still dominate producer support in most countries, encouraging output, laying stress on natural resources and distorting trade. Moreover, there has been only very modest progress towards policies targeted to clearly defined objectives and beneficiaries.

New Zealand

New Zealand has a vibrant, diversified and sustainable rural economy. Government handouts were discontinued 15 years ago. Left to face the market, farm families have succeeded by their own efforts. Their experience provides a message of reassurance to farmers, policy makers and others facing change. The New Zealand experience has debunked the myth that the farming sector cannot prosper without government subsidies.

New Zealand exports 80% of its agricultural produce and has the lowest level of support for industrialized countries at around 2% compared to the OECD average of 40%. Most of this support relates to agricultural research funding. At the time of removal of subsidies only 1% of the farming families faced bankruptcy and forced to sell their land. The government's financial assistance to make the transition to an unsupported market was minimal; a one-off "exit" grant – equivalent to about two-thirds of their previous annual incomes, some access to social welfare schemes and limited financial advice. The New Zealand experience has proved to the world that for family farming there is life after subsidies.

(B) Crop Insurance

Spain

Spain has a rich tradition of insuring its agriculture. Different systems with varying degrees of involvement of the state were tested between the 1920s and the 1970s. Overall success, however, remained limited and participation rates low.

The basic feature of the system is that all insurable agricultural risks are covered by the private sector and all types of policies are subsidized by the State. Most policies are of the "multiple-risk" type. In the year 2000, about 30 per cent of Spanish producers participated in the system and about 30 per cent of crop and 10 per cent of animal production were covered.

The system is based on an intricate partnership between the private and the public sectors. The customers of the system are farmers who can take out agricultural insurance individually or obtain coverage through cooperatives and professional organisations. Participation in the system is voluntary. Besides the customers, the key-players of the system are:

- a. ENESA (Entidad Estatal de Seguros Agrarios), attached to the Ministry of Agriculture, Fisheries and Food. Its President is the under-secretary of the Ministry and its Director is appointed by the Minister of Agriculture. All stakeholders of the system, including farmers, are represented in this organisation.
- b. AGROSEGURO (Agrupacin Espanola de Entidades Aseguradoras de los Seguros Agrarios Combinados), a pool of sixty private insurance companies, which participate in a system of co-insurance. According to this system, the companies share the total risk underwritten in a given year by all members in proportion to their participation in the equity of AGROSEGURO. AGROSEGURO, on behalf of its members, assumes the day-to-day running of the programme, i.e. fixing and collecting premia, assessing losses, paying compensations, etc.
- c. CCS (consorcio de Compensacion de Seguros), a public enterprise with own resources, operating as a re-insurer (under the control of the Ministry of Economy), Re-insurance with CCS by all players is obligatory.

For any given year, ENESA takes the lead in publishing the annual plan. On the basis of the framework set out in the plan, AGROSEGURO fixes detailed conditions for all insurance products, in particular the regionally differentiated premium rates, which vary according to risk exposure and also include administrative and re-insurance costs. Once the conditions for the various products are set, they are then commercialized through the networks of insurance companies, which are members of the pool of

AGROSEGURO. Obligatory re-insurance is provided by CCS and additional private re-insurance is provided by private companies for viable lines for coverage going beyond the level provided by CCS.

Subsidies from the state and the regions are paid out by ENESA and channelled through AGROSEGURO to the insurance companies. Public subsidies amount up to 41 per cent of the premium. For the period of 1980-1999 taken together the claims/premium ratio was 113 percent. Losses are covered by the insurance industry and CCS.

A key feature of the Spanish system is the participatory approach. All stakeholders are represented in ENESA, which enables taking strategic decisions and fixing the framework for the system (annual plans) in line with their needs.

United States of America (USA)

The Federal Crop Insurance Corporation (FCIC) was created in 1938 as a wholly owned Government corporation. It is currently administered by Risk Management Agency (RMA) of the United States Department of Agriculture (USDA). The RMA was set-up in 1996 to administer the agricultural insurance programmes and other non-insurance related risk management and education programmes that help support US agriculture. The RMA regulates and promotes insurance programme coverage, sets standard terms including premium rates, insurance contracts, ensures contract compliance, and provides premium and operating subsidies. Substantial premium subsidies are involved. Crop insurance policies are delivered, sold, serviced, and underwritten by private insurance companies under the supervision of and monitoring by RMA.

Companies, which are approved by FCIC to deliver crop insurance must annually submit plans of operation for approval by FCIC. The plan provides the FCIC with information on the ability of the company to pay potential underwriting losses and on the allocation of the company's crop insurance business to the various risk sharing categories for the purpose of re-insurance. In addition to re-insurance, the companies are paid a subsidy by FCIC for administrative, operating and loss adjustment costs. The levels of administrative and operating subsidy and the terms of re-insurance are specified in the Standard Reinsurance Agreement (SRA), which applies to all the companies delivering FCIC-reinsured policies.

Private companies share the risk with FCIC by redesigning their crop insurance policies to risk-sharing categories, called reinsurance funds. Companies retain or cede to FCIC portions of premia and associated liability (potential indemnities). FCIC assumes all the underwriting risk on the ceded business and various shares of the underwriting risk on retained business, determined by the particular category and level of losses. Companies can further reduce their underwriting risk on retained business through private reinsurance markets.

Insurance companies may develop new insurance products, which have to be submitted to the FCIC for approval. They can also offer private coverage without government support that supplements crop insurance programmes.

Australia

Australia does not currently have any publicly supported agricultural insurance programme. Some risk mitigation is occasionally done through loan support and transplantation and storage subsidies when prices are unfavourable. Private companies offer farm insurance related to accidents but rarely crop insurance.

Thailand

Thailand currently does not offer crop insurance but there is a great demand and an Act has been passed to facilitate its introduction. Operational details are still being worked out.

Argentina

This country has many of the features of developed agriculture, so it is not surprising that some 25 per cent of the total crop is insured, mostly against hail damage, though a start has been made to introduce multi-peril policies. The crops concerned include soyabean, wheat, sunflower and maize. Insurance on grapevines and other fruits is also important. The agriculture insurance business is competitive. Around 25 companies and mutual entities operate in this area. Some of them have invested significantly in technical expertise. For example, one company, with about 12 per cent market share, employs eight full time agriculturists in order to design policies and to manage the insurance products being sold.

Brazil

Brazil has had a crop insurance programme subsidized by the Government. This has gone into some serious problems due to its desire to cover too much risk too quickly.

More recent developments have progressed in a slower and better-informed manner and have been largely led by the private sector. New style apple cover started in 1998, wine and table grape covers in 1999, and broad acre crops such as soyabean, wheat and maize in 2000. Despite these developments, crop insurance business is very small in relation to the size of the agricultural sector in the country. Some recent developments include moves to introduce crop-revenue products under area-based determination of loss.

Cyprus

The Agricultural Insurance Organization of Cyprus (OGA) was established under an Act in 1977, following earlier attempts to structure relief payments for farmers affected by adverse climatic events. After investigation, the format of a parastatal insurance corporation was adopted. A wide variety of crops such as cereals (drought, rust, hail), deciduous fruits (hail), and grapes and citrus (frost, hail), are covered against a range of perils.

There is a continuous demand from growers to extend the range of risks covered, especially, against windstorm, excessive rain and excessive heat. The OGA employs professional agriculturists, both for product development and for supervision of loss assessment.

Malaysia

Malaysia's agricultural sector combines large-scale plantation enterprises with large numbers of small-scale producers. Both types have access to crop insurance, but the larger scale farms usually buy more

insurance cover. Insurance is available for oil palm, cocoa, rubber, for several species of timber trees, as well as for tropical fruits such as durian, mango and mango steen.

As with many other countries, the Malaysian experience with crop insurance has been mixed, but companies are taking a professional attitude to understanding the risks and to design policies accordingly. A new initiative is towards developing an insurance product for paddy rice.

Mauritius

A parastatal agency, the Mauritius Sugar Insurance Fund (MSIF) was established about 50 years ago in order to provide protection to the island's sugar farmers against losses from cyclones. As experience has been gained, and staff trained, this programme has gradually taken on coverage of other risks. For example, fire and excessive rain were added in 1974 and losses from yellow spot disease (only in conditions of excessive rain) in 1984.

The programme has also developed a sophisticated method for rewarding growers whose claims history has been good for the insurer. All growers are placed, for each insurance/growing season, somewhere on a 100-point scale. Their position on this scale determines the level of premium to be paid and the indemnity level they will receive in the event of a claim for that insurance period. The scale is dynamic, with movements up and down being dictated by claims experience.

Philippines

Some 22 cyclones, on an average, strike the Philippines each year, and of these four cause significant damage. The northern and central parts of the country are more affected than the south, where the main perils for farmers are drought and pests. The present crop insurance programme grew out of an agricultural guarantee fund, which was operated by the Land Bank of the Philippines, the principal government bank servicing the agricultural sector. The insurance is operated by a parastatal entity, the Philippines Crop Insurance Corporation (PCIC), which began business in 1981, after a three-year preparatory period.

Designed initially to provide risk management to borrowing farmers and their lenders, the PCIC also offers policies to self-financed farmers. Participation in insurance is compulsory for farmers in the higher-potential agricultural areas, for two crops, maize and rice. This element of compulsion has not resulted in a negative reaction by growers - probably because the premiums paid to PCIC, at approximately 8 per cent for rice and 7 per cent for maize, are heavily subsidized, by the government and by institutional lenders, so that farmers pay only a proportion of these amounts.

Syria

The Syrian government has endeavoured to introduce crop insurance, and is still (in 2004) understood to be undecided as to whether to direct the state-owned insurance company, a monopoly insurer, to develop and market crop policies. This is because as is well known, drought is perhaps the most difficult peril to include in any insurance cover especially in the early years of a programme, when procedures are still being developed, and the staff is gaining experience.

The Syrian position illustrates a classic dilemma that has fairly general applicability in arid and semi-arid countries. Officials understand that drought will be difficult to include at the start of any crop insurance

programme, yet are well aware that unless insurance products cover this peril, there will be a very negative reaction from farmers. This may justify investigating the applicability of one of the new developments in crop insurance, namely index (coupon) insurance products.

(C) Support under Conditions of Distress

United States of America (USA)

In Wisconsin, State experience showed that farmers in distress required a range of services: financial consultation, legal advice, social support, spiritual guidance, emergency needs (food, clothing, and fuel oil), job counselling and/ or job training, emotional counselling, and others. It is helpful if agents can be aware of availability of such resources within the community and be able to refer farm families for assistance. The referral will be much more effective if the agent knows the job counsellor or mental health counselor [Williams, R.T (1996) "The On-Going Farm Crisis: Extension Leadership in Rural Communities", Journal of Extension, Vol. 34 (1)].

Wisconsin Act, 1996 was passed with the objective to address farm mediation and arbitration programme, the farmer assistance programme, exit from and entry into the dairy industry and granting rule-making authority.

Problem-solving appraisal and coping strategies are to be important variables in the complex coping processes of Midwestern farmers engaged in major career transition. According to a study by Cook and Heppner (1997), intervention programmes to aid farmers should be geared toward increasing farmers' sense of mastery, specifically problem-solving skills. They suggested that more research on farmers engaged in major career transition is needed to examine the consequences of farmers' coping skills on resolution of the problem, perseverance, and hopelessness [(Bosch, K. R., (2004) Cooperative "Extension Responding to Family Needs in Time of Drought and Water Shortage", Journal of Extension (2004) Vol. 42(4)].

The Agriculture Assistance Act, 2003, passed to assist farmers encompasses crop disaster programme, livestock compensation programme, livestock assistance programme, sugar beet/cane producers' programme, cottonseed payment programme and tobacco payment programme. These are well laid out compensation and support programmes to assist farmers in case of distress arising out of natural disasters.

The US government also runs Non-insured Crop Disaster Assistance Program to cover a landowner, tenant, or sharecropper who is expected to share the risk of producing an eligible crop (non-insurable crops and agricultural commodities for which the catastrophic risk protection level of crop insurance is not available). The eligibility for participation in the programme is restricted to those with an annual gross revenue not exceeding US\$2 million. The programme provides support during natural disasters, /-damaging weather such as drought, freeze, hail, excessive moisture, excessive wind, or hurricanes; an adverse natural occurrence, such as earthquake or flood; or a condition related to damaging weather or an adverse natural occurrence, such as excessive heat, disease, or insect infestation. Those participating in the Program must apply for coverage by payment of service fee (equal to \$100 per crop per county, or \$300 per producer per county, not to exceed a total of \$900 per producer for all counties). Farmers with an annual gross income not exceeding \$20,000 from all sources (including income from a

spouse or other household members) for each of the 2 prior years can seek exemption from payment of service charges. The farmer has to report crop acreage information annually to the US Farm Service Agency (FSA). When crop or planting is affected by a natural disaster, the local FSA office must be notified within 15 calendar days of the occurrence of the natural disaster. To receive compensation the natural disaster must have either reduced the expected unit production of the crop by more than 50 per cent; or prevented the producer from planting more than 35 per cent of intended crop acreage. NAP covers the amount of loss greater than 50 per cent of the expected production, based on the approved yield and reported acreage.

The FSA also runs an emergency loan programme to assist farmers to recover from production losses when natural disaster strikes. Emergency loan funds are made available to farmers at an interest rate of 3.75% p.a. to support farmers in areas, which have been declared by President or Secretary of Agriculture as being afflicted, and are unable to avail credit from commercial sources but have some collateral to offer. Farmers can borrow up to 100 per cent of actual production or physical losses subject to a maximum amount of \$500,000 for a period ranging from 1 to 7 years, depending on the loan purpose, repayment ability, and collateral available. In special circumstances, terms of up to 20 years may be authorized.

Australia

The high evidence of stress and the consequences of these stressors, such as loss of self-esteem, leading to withdrawal from social and community activity, inhibition of adaptive responses, poor decision making about financial and family matters, depression, and the breakdown of family relationships, led the Australian government to provide farm families with drought relief programmes. These included such programmes as a recovery guide, hot line, training to enhance skills of primary producers, farm debt mediation, and rural women's networks to provide information and resource links [Stayner, R. & Barclay, E. (2002), Welfare and support services for farm families. (A report for the Rural Industries Research and Development Corporation, May, 2002, RIRDC Publication No. 02/042)].

The church is also seen to play an important role in providing spiritual guidance. They run referral programmes to assist distressed persons, including farmers.

Africa

In order to eliminate "witch killings" in Tanzania, one of the measures suggested is to improve the system of formal insurance against extreme rainfall shocks, to provide households with better means of smoothing their consumption across years of good and bad rainfall. The existing African Famine Early Warning System could provide detailed and reliable quantitative local weather measures for such a large-scale formal insurance scheme in Tanzania or elsewhere in Sub-Saharan Africa. Another policy option suggested is to provide elderly women with regular pensions, which could transform them from an economic liability into an asset and help households smoothen their consumption. This measure had a substantial impact in South Africa.

Social funds help finance small projects, identified and implemented by poor communities, which usually provide co-financing. Almost 50 countries, mostly in Latin America and Sub-Saharan Africa, operate social funds or similar entities. Recently, Eastern European and Central Asian countries have begun to

set up social funds. Bolivia government, for the first time, in 1987 had set up the social fund as an emergency response to general economic downturn. The social funds are not coping instruments, but they address a wide range of objectives, including infrastructure, community development, social services and support for decentralization. Social funds have also gradually started supporting income generating projects, stimulating school enrollment and health centre use, and strengthening the social capital of communities. They have proved to be flexible, quick and cost-effective. Social funds use three targeting devices to reach poor people: investment selection (mainly basic services), project screening (to ensure that most beneficiaries are poor) and geographical targeting (of poor areas). In countries like Argentina, Chile, Mali and Romania, the funds supported capacity building in poor communities. In Malawi and Zambia, social funds are introduced in poverty mapping to identify pockets of poverty. (Source: World Development Report, *ibid*, Pg. 155-156).

FAO funded project in Ethiopia has achieved measurable improvements in the health and nutrition status of the project beneficiaries (farmers distressed due to a variety of factors). The project aimed at interventions in agriculture, health, education, water, and sanitation. The features of the project are as follows:

- ❖ Priority was given to assisting female-headed households, which accounted for large number of malnutrition cases and made up about 30% of the population in the project areas.
- ❖ Project implemented through community action plans aimed at people and their ability to acquire and utilize food they need, and not about technologies and inputs. Interventions were modulated in response to community action plans and micro-projects that groups of beneficiaries prepared for themselves, with technical assistance from government services and NGOs.
- ❖ Successful interventions were for intensive fruit and vegetable production and orchards. Production of cash crops such as garlic and spices proved to be a viable income generating activity for farmers, especially landless households and small holders without oxen. [In Sudan also vegetable farming has been undertaken near the camps of distressed farmers using run-off water from nearby pumps for irrigation]
- ❖ Realizing the income potential of horticultural production, funding micro-projects involving supply of seeds, tools and training for 800 households, creation of ten school gardens and support for "nutrition clubs" benefited the local community.
- ❖ Other income-generating activities focused on introducing beekeeping, small ruminants and poultry raising.
- ❖ To encourage conservation of natural resources, micro-projects were also approved for planting degraded communal grazing land with fuel wood trees creating livelihood for landless families. The introduction of energy-efficient stoves was described as "an unqualified success".
- ❖ Another major objective of the FAO project was to promote health and prevent diseases through improvements in diet, access to safe drinking water and sanitation. The project also provided training and equipment for traditional birth attendants in all the target villages. Health supplements were provided to children to prevent damage to brain and health in the long run.
- ❖ Working with rural Skills Training Centres (STCs), the project helped promote off-farm employment opportunities. Funds were provided for upgrading facilities used for training in blacksmithing, sewing, tailoring and weaving, and trainees took courses in making fibre and clothes. Since the

communities have little or no access to micro-finance institutions, the project also used the STCs as vehicles for disbursing investment funds.

Korea

The Government of Korea introduced a temporary livelihood protection programme with funding to cover 7,50,000 beneficiaries. It also introduced a means-tested noncontributory social pension for 6,00,000 elderly people. (Source: World Development Report, *ibid*, Pg. 167).

Latin America

Public work programmes are useful counter-cyclical instruments for reaching poor unemployed workers. They can be easily self-targeting by paying wages. A well-designed and well-funded workfare programme is a mix of risk mitigation and coping. To mitigate risk, the programme must inspire confidence that it will continue to be available after a crisis. Some workfare programmes such as Trabajar in Argentina and Temporary Employment Program in Mexico have succeeded in creating employment for poor people. (Source: World Development Report, *ibid*, Pg. 155-156).

Some middle-income countries have set up universal health insurance, as Costa Rica and the Republic of Korea did in the 1980s. But most low-income countries can offer only limited health insurance, usually providing minimum benefits for all illnesses rather than full insurance for infrequent but very costly illness. Public provision of insurance against catastrophic health risks could thus significantly improve the welfare of poor people where households are unable to insure against these risks themselves. The evidence further suggests that premiums can be quite low and well below households' willingness to pay. Countries as diverse as Costa Rica and Singapore have implemented health insurance schemes with near universal coverage.

Bangladesh

In Bangladesh, a group of scientists proved that insecticides are a complete waste of time and money and they could significantly reduce the amount of nitrogen fertilizer. Livelihood Improvement through ecology has provided relief to the farmers in the cost of production without much reduction in yields. The success of the initiative was achieved through training the farmers and spread of the practice through farmer-to-farmer interaction

China

Credit rating through the national credit union network has enabled millions of Chinese farmers to access credit mortgage-free, at rates lower than their urban counterparts This tackled the twin problems of access to credit by disadvantaged farmers due to lack of a credit rating system and reduction in cost for handling large number of small loans by credit agencies

Some International Credit Guarantee Systems

1. Credit Guarantee System in Japan:

1.1 The Credit Guarantee System in Japan is characterized by two functions:

- i) A "Credit Guarantee" function that enables Credit Guarantee Corporation (CGC), a public institution established under the Credit Guarantee Corporation Law, to guarantee financial institutions against risks associated with loans to SMEs, and
- ii) A "Credit Insurance" function in which Japan Finance Corporation for Small and Medium Enterprise (JASME) funded by public money reinsures these credit guarantees.

1.2 When CGC approves a credit guarantee and a loan is extended by a financial institution based on that approval, the loan is automatically insured by JASME. For this insurance, CGC pays a credit insurance premium to JASME. If CGC makes payments under guarantee to the financial institution, the CGC claims 70%-90% of the subrogated amount from JASME. If CGC subsequently collects the subrogated payments from SME, CGC is required to pay part (70%-90%) of the money collected to JASME. This insurance system plays a key role in protecting the solvency of CGCs and strengthening their creditworthiness.

1.3 While the operations of (50+)CGCs are financed primarily by the guarantee fee and capital gains on CGCs' assets, the national and local governments also provide financial support to the credit guarantee corporation to promote its operations and enhance the management base through National Federation of Credit Guarantee Corporations (NFCGC) being funded by National Government.

2. Credit Guarantee System in Korea:

2.1 The Korea Credit Guarantee Fund established in 1976 by the KCGF Act is a public institution providing comprehensive support to SMEs. It is funded by contributions from the government, subject to yearly budgets; contributions from financial institutions (0.2% of designated type of loans); guarantee fee, interest, etc. The KCGF can provide credit guarantee up to 20 times its capital funds. Under credit guarantee services the Fund covers 70%-85% of loans extended by the financial institution to the enterprise or transaction liabilities assumed by the enterprise (with a monetary ceiling on credit guarantee in respect of a single company) depending on the type of guaranteed liability, and credit rating of the borrower. The guarantee fee is charged between 0.5% and 5% per annum on the basis of credit rating of the enterprise. An additional 0.5% is charged for large enterprises. In view of the increase in losses on guarantee operations there are plans to increase the average guarantee fees, reduce average coverage ratio, and have selective and focused support in order to ensure efficient utilization of guarantee resources. There is, however, no guarantee scheme exclusively for agricultural loans.

3. Credit Guarantee System in Thailand:

The Small Industry Credit Guarantee Corporation, a state owned enterprise and a specialized financial institution, was established in 1991. It was renamed as Small Business Credit Guarantee Corporation (SBCG) in September 2005. Its objective is to provide credit guarantee up to the maximum limit of five

times its capital for viable SMEs with net fixed assets below the level of 200 mio. baht. The entrepreneurs shall be of Thai nationality and operating in Thailand. The guarantee fee @1.75% p.a. is collected in advance by the lenders and remitted to the SBCG.

4. Credit Guarantee programmes in the Philippines:

4.1 There are three government financial institutions operating in the Philippines to cater to the needs of credit guarantees, namely (i) Small Business Guarantee and Finance Corporation (SBCorp) (ii) Quedan Rural Credit and Guarantee Corporation (Quedancor) and (iii) Trade and Investment Development Corporation (Tidcorp).

4.2 Quedancor, attached to the Department of Agriculture, is mandated to accelerate the flow of investments and credit resources into the countryside so as to trigger growth and development of rural productivity, employment and income opportunities. Quedancor has introduced a credit mechanism that is collateral-free and gives better access to farmers as a means to improve agricultural production, increase yield and augment farm level income.

4.3 In respect of all the three institutions the guarantee cover extends from 60 to 90% of the outstanding loan and the guarantee fee ranges from 2 to 3% of the guaranteed portion. The institutions also charge a processing fee, which ranges from 0.1 to 3%. Insurance of assets and collaterals are essential conditions in respect of loans to be covered. A cost-benefit analysis was carried out which found that these programmes were heavily subsidy-dependent and that their operating expenses far exceed premia or guarantee fee receipts. Time consuming procedures in the programmes contributed to a high transaction cost of borrowing. Covering the loans to a substantial extent also led to moral hazard. Financial institutions were found not to have exercised adequate care as the loans are fully backed up by government guarantees, which have led to increase in non-performing loans.

5. Farm Credit Guarantee System in Taiwan:

Taiwan's farmer credit guarantee system, in existence for twenty years, is a non-profit one with an objective of providing supplemental credit guarantee to the farmers who lack sufficient collateral so that financial institutions are encouraged to extend agricultural loans. The Agricultural Credit Guarantee Fund (ACGF) was set up in 1984 with contributions chiefly from the Ministry of Finance. The agricultural banks and the credit departments of farmers' and fisherman's Associations lend money to farmers or agriculture related borrowers. If the borrower lacks sufficient collateral the ACGF can provide guarantee to cover the risk of the financial institution, up to a ceiling of US\$1.43million for a single client. Eligible clients of the ACGF include individuals and organizations, which are engaged in farming, forestry, fishery and livestock production, processing, distribution, and warehousing, recreational farm businesses and other agricultural development businesses, as well as members of farmers' and fishermen's associations. The ACGF covers loans to the extent of 90% in case of agricultural-policy loans and 80% for general agricultural loans. In case of default the ACGF is liable for the repayment of the principal, the interest of the loan (six months), and the legal expenses. Credit institutions are required to prove that they have managed the case with due diligence before ACGF pays. There are two basic rates of the guarantee fees, 0.35% for individuals and 0.7% for a company or a cooperative. In case loans are covered by collateral, the fees are

lower at 0.15% for individuals and 0.5% for companies or cooperatives. The ACGF is, however, facing challenges –

- i) to improve its financial position;
- ii) to prevent the moral hazard of unsatisfactory credit appraisal and credit monitoring in contracting institutions; and
- iii) to facilitate the development of advanced technology and practices in agricultural industries.

6. Agriculture Credit Guarantee Scheme Fund of Nigeria:

6.1 The Agriculture Credit Guarantee Scheme Fund (ACGSF), set up in 1978, is managed by the Central Bank of Nigeria. It provides guarantee cover to banks who give loans to the agricultural sector. The share capital of the Scheme is held in the ratio of 60-40 by the Federal Government and the Central Bank, respectively. A farmer intending to obtain a loan has to approach a bank operating the scheme and deposit 25% of the loan amount required (where it is in excess of N20, 000) as security. He has also got to get an insurance cover for his farm. Credit Guarantee is extended under a Trust Fund Model of the scheme. The Trust Fund Model is a framework for enhancing credit purveyance to the agricultural and rural sectors of the economy. Under the Model, oil companies, State/Local governments and NGOs place funds in trust with the lending banks to augment the small group-savings of the farmers as security for agricultural loans. The Trust Fund secures 25% or more of the intended loans of the prospective borrowers, the farmers' savings secure another 25 per cent while the ACGSF guarantees 75 percent of the remaining 50% thereby leaving the lending bank with a risk exposure of only 12.5 per cent. Sometimes, the state government, taking cognizance of the low capacity of the poor farmers in the state, may decide to increase its stake beyond 25% in order to assist the peasant farmers who may be unable to muster sufficient savings to qualify for a meaningful amount of loan.

6.2 Under an interest drawback programme developed to assist borrowers under the ACGFS, farmers who liquidate their loans within the stipulated time are entitled to an interest rebate of a specified percentage.

7. Credit Guarantee Programmes in the European Union(EU):

In the countries of the EU credit guarantee is provided by the Governments/National and Regional Development Banks/Funds/Special Financial Institutions/other corporate entities/Multilateral Development Banks. There are guarantee institutions in all the 25 countries. Their number varies from 1 (Finland) to more than 500 (Italy). The objective of these institutions is to facilitate access to finance and promote start-up/fast growing enterprises/restructuring/regional development/employment/long term credit. and also to encourage counter cyclical lending. The guarantee institutions receive public support in the form of counter guarantees/risk capital/fund/ guarantee loss subsidy/administrative cost subsidy/tax incentives. The guarantees offered may be direct or counter (different European countries have different schemes for counter guarantee). The guarantees could take the form of deficiency guarantees covering bad debts, intermediate forms for managing the liquidity of the guarantee institution or joint and several guarantees for addressing the issue of moral hazard. The credit guarantees are issued for investment, working capital as well as performance. The cover is available for short, medium and long-term loans of up to 20

years and is available to both the micro as well as big loans. The guarantees cover principal, interest and other costs. The coverage ratio in general is between 50 to 80%. Guarantee fees, depending upon the risk, size, currency and purpose of the loans as also the macro economic priority, fall in the range of 0.5 to 3.5% p.a. A few guarantee institutions also charge a processing fee of around 0.5%. It has been observed that no credit guarantee institution generates operational income adequate to cover total costs. Public support (directly from Government or through other public institutions) secures the sustainability of credit guarantee in the 25 countries of the EU.

A Matrix of Issues

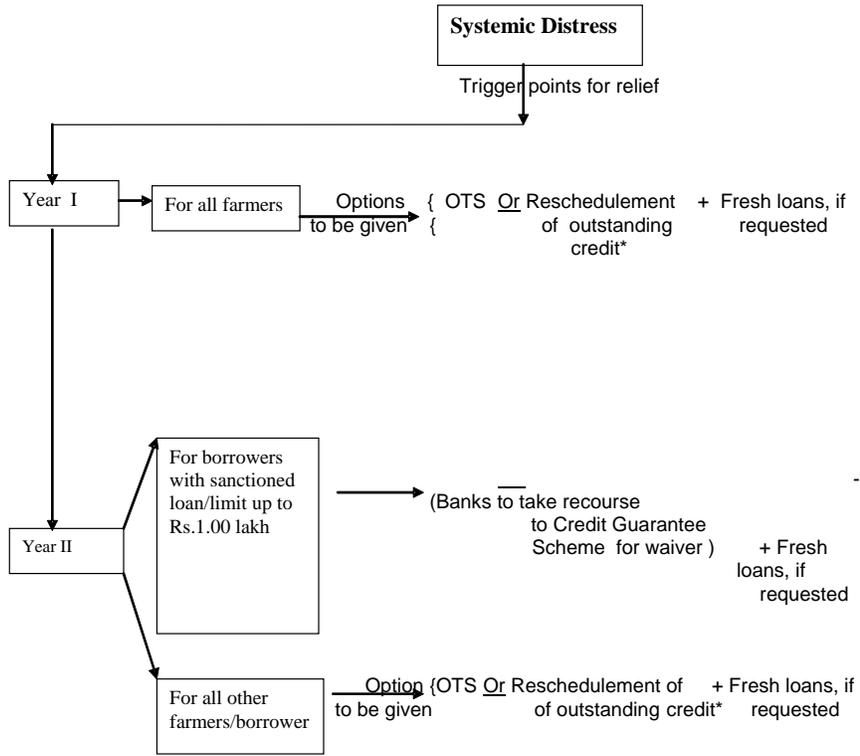
Issues	Supply side	Demand side
Credit	<p>Formal sources: Decline in the number of branches, decline in agricultural credit/direct finance to agriculture as a percentage of NBC, and there is a shift to value addition activities.</p> <p>Increasing dependence on informal sources – relatively more among smaller farmers.</p>	<p>Formal sources not timely.</p> <p>Repayment difficult during crop loss and price shocks.</p> <p>Instead of getting them out of credit, the system draws them into it.</p> <p>Difficulties in meeting consumption requirements and other social obligations.</p> <p>An increase in market induced consumerism.</p>
Input	<p>No link between publicly funded research and its extension. This is particularly missing for crops/cultivation in dry land areas.</p> <p>Technological change is substantial and there is an increasing reliance on the unregulated private suppliers.</p> <p>Inadequate public investment in agriculture (spread of irrigation in arid regions is a casualty).</p>	<p>Supplier-induced-demand is on the rise. This is credit-intensive and an important reason for putting the farmer in a quagmire of indebtedness.</p> <p>There is deskilling. With new technology come new methods of cultivation. Social capital of knowledge in cultivation is rendered redundant. A case in point is the introduction of Bt Cotton seeds.</p> <p>Greater investments in assets like bore wells in Andhra Pradesh not only increases cost, but has also led to a tragedy when the investments failed.</p>
Output/ Price/ Income	<p>Increased volatility due to global prices.</p> <p>Price distortion through subsidies by developed countries.</p> <p>Low tariff in India.</p> <p>Minimum support price not functional. A case in point is the Monopoly Cotton Procurement Scheme (MCPS) of Maharashtra.</p> <p>Forward market – it is a virtual world that will hardly benefit the farmer. In fact, price volatility is the basis through which hedger/speculator can operate.</p>	<p>Cultivation not profitable.</p> <p>Income not sufficient for meeting higher education of wards, medical expenditure and other social obligations.</p> <p>Yield risk because of weather, water and power availability, pests, and spurious quality of inputs among others.</p>
Other Issues	<p>Interlinked credit, input and output markets.</p> <p>Non-farm income opportunities limited.</p> <p>Public health response to occupational health hazards of farming is wanting.</p> <p>Easy availability of pesticides and other hazardous substances.</p>	<p>Political dominance of moneylender and/or input dealer and output buyer.</p> <p>Higher family size: more daughters – greater dowry burden.</p> <p>Lack of social support.</p>

Features of the proposed Credit Guarantee Scheme

- a) All the commercial banks including RRBs, and rural cooperative banks (state and central cooperative banks) have to compulsorily participate in the Scheme.
- b) The Scheme will cover only the borrowers affected by 'systemic distress' ('Systemic Distress', for the purposes of the Scheme, will cover extensive loss of crops/assets caused due to natural calamities and pests/locusts on an epidemic scale).
- c) The Scheme covers those borrowers with aggregate sanctioned limits up to Rs.1 lakh granted after introduction of the Scheme, and whose loans are required to be restructured/rescheduled for the second successive time on account of systemic distress.
- d) The earlier restructuring/reschedulement should have been done as per the Reserve Bank's/NABARD's guidelines.
- e) Consumption loans will not be covered under the Scheme except to the extent included in the KCC limit.
- f) The Scheme shall guarantee up to 60 % of the amount outstanding in the guaranteed account/s, as on the date of occurrence of the natural calamity, necessitating restructuring/reschedulement for the second successive time. The balance loss should be borne by the bank/s concerned.
- g) Credit guarantee will be available only in respect of the borrowers where the crops/assets have been insured.
- h) Banks can lodge claims with DICGC only after they have invoked and obtained all other insurance and other covers available in respect of the 'distressed' borrowers, and writing off the residual dues of the 'distressed' borrowers.
- i) If any state government announces waiver of principal due to the banks and/or interest due thereon, amounts covered by such waivers will not be covered under the Scheme. The banks will have to claim such amounts from the state governments concerned and lodge the claims with the DICGC only for the balance amount.
- j) The borrower whose claims have been settled under the Scheme will be eligible for fresh finance.
- k) The balance in the existing Credit Guarantee Fund may be transferred by Reserve Bank to the corpus of the Credit Guarantee Fund (CGF), to be created under the new scheme.
- l) The CGF shall be kept distinct from the Deposit Insurance Fund.
- m) The participating banks may pay a guarantee fee at a rate that may be decided by the DICGC keeping in view the overall viability of the scheme. DICGC may work out the amount based on the amount of loans outstanding in respect of the accounts to be covered and the amounts of loans rescheduled during the past, say, five years. The banks should not debit such guarantee fee to the borrowers' accounts.
- n) The fee may be paid on a half-yearly basis as on (September 30th and March 31st of the year) on the amount outstanding in the account of borrowers with an aggregate loan limit up to Rs.1 lakh. The fee so collected may be credited to the CGF.
- o) The shortfall, if any, between the amount available in the CGF and amount of claims to be settled may be met by Reserve Bank, NABARD and Central Government in such proportion as may be mutually agreed upon by them.

p) A mechanism may be put in place by DICGC for continuous monitoring of the scheme and review at appropriate intervals.

ANNEX V



* As per Reserve Bank's guidelines