A Special Programme for Marginal and Small Farmers





NATIONAL COMMISSION FOR ENTERPRISES IN THE UNORGANISED SECTOR

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NATIONAL COMMISSION FOR ENTERPRISES IN THE UNORGANISED SECTOR

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Earlier Reports of National Commission for Enterprises in the Unorganised Sector

- Social Security for Unorganised Workers, May 2006
- 2. National Policy on Urban Street Vendors, May 2006
- Comprehensive Legislation for Minimum Conditions of Work and Social Security for Unorganised Workers, July 2007
- Conditions of Work and Promotion of Livelihood in the Unorganised Sector, August 2007
- 5. Financing of Enterprises in the Unorganised Sector, November 2007
- Creation of a National Fund for the Unorganised Sector (NAFUS), November 2007
- Report on Definitional and Statistical Issues relating to Informal Economy, November 2008

December, 2008

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D.O.No.25024/3/2008 Dated the 3rd December, 2008

Dear Prime Minister.

As you are aware, the National Commission for Enterprises in the Unorganised Sector was given the mandate to examine various issues and problems relating to the Unorganised Sector and suggest measures to address them.

Following a precise definition of the unorganized sector in India covering all unincorporated partnership and proprietary enterprises employing less than ten persons, the Commission has applied the enterprise definition to agriculture wherein all agriculture undertaken on private holdings, singly or jointly, is treated as unorganized. Of an estimated 252.8 million workers engaged in agriculture in 2004-05, 114.5 million were marginal farmers and small farmers, holding less than 2 hectares of land per family.

The Commission has now examined in detail the conditions of work and livelihood of marginal and small farmers and prepared a report. In this report, the Commission has projected the numbers of marginal and small farmers in India and their contribution to agricultural production. The Commission has also examined the various issues confronting these farmers, including their low access to services, low value realization, and low level of diversification, leading to a deficit in incomes over expenditure. The Commission is of the view that the situation requires immediate corrective measures and the problems confronting Marginal and Small Farmers at this juncture require a fresh and focused approach. We have accordingly recommended a Special Programme for Marginal and Small Farmers, which if implemented, will, in our view, substantially improve the condition of this vast segment. We have held extensive discussions on this with the officers in the Ministry of Agriculture and the Minister of Agriculture himself.

We are now pleased to submit to you the Commission's report on A Special Programme for Marginal and Small Farmers for appropriate action.

Dr. K.P. Kannan Member Dr. R.S. Srivastava Member

Sel |-Dr. T.S. Papola Member (Part time) V.K.Malhotra Member Secretary

> B.N. ugandhar Member (Part time)

Yours sincerely

Arjun Sengupta

Dr. Manmohan Singh Prime Minister of India PMO, South Block, New Delhi- 110011

Acknowledgements

The Commission wishes to acknowledge the contributions made to this Report by a large number of persons.

The Commission benefited by the discussions in the Advisory Board as well as suggestions made by several members of the Board. Members of the Technical Expert Group met twice to discuss earlier drafts of this Report and gave valuable advice and suggestions. We would specially like to acknowledge the detailed comments on the Draft Report made by Prof. Sheila Bhalla, Visiting Professor, IHD. A background Paper for this Report was prepared by Prof. D. Narsimha Reddy.

We are specially grateful to Shri Sharad Pawar, Hon'ble Union Minister for Agriculture, for discussing elements of this Report with the Commission in two separate meetings. We are also thankful to officials of the Ministry of Agriculture, especially Shri T Nanda Kumar, Secretary, Department of Agriculture and Cooperation, and Dr S M Jharwal, Principal Advisor, for participating in deliberations with the Commission on several occasions, and sharing information on various aspects of policies and programmes.

The Commission shared its preliminary conclusions with Prof. Abhijit Sen, Member, Planning Commission, and we are very grateful to him for his comments and feedback. The Commission also had the opportunity to discuss the report with various state governments and various fora in states during visits to West Bengal, Sikkim, and Maharashtra.

This report would not have been possible but for the support of various other individuals, inside and outside the Commission. The core statistical work for the Report was carried out by Ms. T. Shobha, along with Ms. Swati Sachdeva. Among others who contributed to the analysis in this Report are Ms. Richa Singh, Shri Jitendra Asati and Mr. Ajaya Kumar Naik.

It is also our pleasant duty to place on record the valuable services rendered by the staff of the Commission. Shri S. V. Ramana Murthy, Director, took on the main responsibility for coordinating all the activities relating to the preparation of this Report. Shri, Savitur Prasad, Joint Secretary, Shri J. D. Hajela, G. Sajeevan and Ashutosh Mishra, Directors in the Commission, Shri G. Raveendran, consultant, Shri D. P. Singh and Shri Suresh Kumar, Under Secretaries, and Shri H. S. Chhabra, Section Officer, provided analytical, administrative or logistical support in the preparation of this report. The supporting staff of the Commission also provided excellent assistance in the tasks related to the Report.

Contents

Cha	apter/ No.	Page No.
	Acknowledgements	j
1	Introduction	1-2
2	Dimensions of Marginal/Small Farming in India	3-6
	Contribution to Over-all Production	5
	Productivity Levels	6
3	Key Issues and Problems of Marginal and Small Farmers	7-22
	Increasing Role of Women in the Farming Community	8
	Social Identity and Farming	8
	Land Reform and Land Rights	9
	Low Level of Formal Education and Skills	11
	Farmers' Income, Consumption and Poverty	12
	Credit and Indebtedness	13
	Issues Relating to Land and Water Management	16
	Use of Farm Equipment and Modern Inputs	17
	Access to Extension Services	17
	Integration into Markets and Risk	18
	Membership of Groups	19
	Significance of Non-farm Income	20
	Conclusion	21
4	Focus on Marginal and Small Farmers: A Case of Relative Neglect?	23-28
	Earlier Strategies for the Development of Marginal/Small Farmers	23
	Recent Initiatives	25
	Strategy during the Eleventh Plan	26
5	The Commission's Approach in the Report on Conditions of Work and	
	Promotion of Livelihoods	29-31
	(I) Special Programme for Marginal and Small Farmers	29
	(II) Emphasis on Accelerated Land and Water Management	30
	(III) Credit for Marginal-Small Farmers	30
	(IV) Farmers' Debt Relief Commission	3.0

Chap	ter/ No.	Page No.
6	Group approaches towards Strengthening Marginal and Small Farmer	s 33-39
	a) Cooperatives	34
	b) Producer Company Model	35
	c) Andhra Pradesh Model	35
	d) SEWA Model	38
	FAO Experience	38
	Concluding Observations	39
7	Elements of the Special Programme for Marginal and Small Farmers	41-46
	Objectives	42
	Principal Activities proposed under the Special Programme	42
	Implementation Mechanism	44
	Financial Resources	45
	Monitoring and Evaluation	46
	References	47-48
	Abbreviations & Acronyms	49-51
	Appendix Tables	52-74
	Annexures	75-78
	List of Tables	
2.1	Size Distribution of Ownership Holding -All India	3
2.2	Changes in Percentage Distribution of Operated Area by Category of Operational Holdings -India (Rural)	4
3.1	Share of Female in Total Persons Engaged in Farming by Size Class of Own Land	i 8
3.2	Percentage of Women among All Cultivators, by Land Size Class	8
3.3	Distribution for Social Groups of Farmer Households by Land Size Category, 200	9
3.4	Literacy and Mean Years of Education of Unorganised Agricultural Self-employer Workers, 2004-2005	ed 11
3.5	Poverty Ratios among Farmers by Socio-Religious Groups and Land (Possessed Classes, Rural 2004 - 2005) Size 13
3.6	Prevalence Rate of Indebtedness by Farm Size, All India (Percentage) 2003	14
3.7	Percentage Distribution of Outstanding Loans by Farm Size & Sources (2003)	14
3.8	Percentage of Farmer Households Using Modern Farming Resources	17
3.9	Access to Information on Modern Technology through Government Programmes Institutions by Land Size Class, 2002-03	/
3.10	Percentage of Farmer Households Reporting Organisational Linkage	20

Cha	pter/ No. Page	No.
	List of Figures	
2.1	Percentage Distribution of Farmers' and Area Operated - All India	4
2.2	Percentage Distribution of Farmer Households	5
2.3	Share of Marginal and Small and Large Farmers in Total Output	6
2.4	Value of Output per Hectare (Rs.) 2002-2003	6
3.1	Percentage of Farmer Households with Awareness of Bio-fertilizers, MSP, WTO by Size of Holdings, 2003	12
3.2	Monthly Income and Consumption Expenditure of Farmers, 2002-2003	12
3.3	Share of Institutional and Non-institutional Sources in Total Outstanding Loan of Farmer Households	15
3.4	Percentage Distribution of Outstanding Loans by Purpose of Loan 2003	16
3.5	Percentage Distribution of Outstanding Loans by Purpose & Land Size Classes 2003	16
3.6	Percentage of Farmer Households reporting Crops Insured at Anytime, 2002-2003	19
3.7	Percentage of Farmer Households Availing any Services from Cooperatives	20
3.8	Contribution of Different Sources in Household Income of Farmers across Farm Size - All India	21
	List of Appendix Tables	
A1	Percentage Land Possessed	52
A2	Percentage of Operational Holdings during the Agricultural Year 2002-03	53
A3	Share of Marginal and Small Farmers in Total Output	54
Α4	Value of Output per Hectare	55
A5	Percentage of Operated Area Leased-In	56
A6	Awareness of bio-fertilizer, MSP & WTO by Size of Holdings (Percentage of Farmer Households) 2003	57
A7	Net farm Income per Hectare of Cropped Area from Cultivation	58
A8	Income and Consumption Per Farmer Household (Rs. per month), by Size Category of Farmers	59
A9	Incidence of Indebtedness among Farmer Households by Farm Size (Percentages) 2003	
A10	Cost of Cultivation per Hectare	61
A11	Area under Irrigation as Per cent of NCA across Farms	62
A12	Percentage of Households reporting use of Fertilizer of the total Farmer Households	63
A13	Percentage of Households reporting use of Organic Manure of the total Farmer Households	64
A14	Percentage of Households reporting use of Improved Seeds of the total Farmer Households	65
A15	Percentage of Households reporting use of Pesticide of the total Farmer Households	66
A16	Percentage of Households reporting use of Veterinary Services of the total Farmer Households	67

Cha	pter/ No. Page	No.
A17	Access to Extension Service Workers as a Source of Information on Modern Technology for Farming by Size of Holdings (Percentage of Farmer Households) 2003	68
A18	Percentage of Farmers with Knowledge of Modern Farming Practices Through Training Programmes, KVKs and Government Demonstrations, (2002-03), (Size Class in Hectares)	69
A19	Access to Any Government Agency as a Source of Information on Modern Technology by Size of Holdings (Percentage Farmer Households) 2003	70
A20	Membership of Cooperative Society by Size of Holdings (Percentage Farmer Households) 2003	71
A21	Membership of a Registered Farmers' Organization, Self-help Group by Size of Holdings (Percentage of Farmer Households) 2003	72
A22	Membership of Farmers Organisation	73
A23	Preference of Farming as Occupation by Size of Holdings (Percentage of Farmers) 2003	74
	List of Annexures	
1	Terms of Reference	75
2	Past and Present Composition of the Commission	76
3	Constitution of Technical Experts Group on Marginal and Small Farmers	77
4	Composition of the Advisory Board	78

1 Introduction

- 1.1 The National Commission on Enterprises in the Unorganised Sector has the mandate to examine the status of the unorganized sector, analyse the constraints on the growth of the sector, and make necessary recommendations. The Composition and Terms of Reference of the Commission are appended as Annexures 1 and 2.
- As part of its Terms of Reference, the Commission has provided a precise definition of the unorganized sector in India covering all unincorporated partnership and proprietary enterprises employing less than ten persons. The Commission has extended the enterprise definition to agriculture wherein all agriculture undertaken on private holdings, singly or jointly, is treated as unorganized. Of an estimated 457.5 million workers in 2004-05, 394.9 million (86.2 per cent) were in the unorganized sector and of the latter, 252.8 million (64 per cent) were in agriculture. Among agricultural workers, while 89 million (35.2 per cent) were agricultural labourers, 74.6 million (29.5 per cent) were marginal farmers, 39.9 million (15.8 per cent) were small farmers, the rest being medium or large farmers. Thus marginal and small farmers constitute 114.5 m workers. According to the 2002-03 Farmers Survey, there were an estimated 75 million marginal-small farmer households in 2002-03.
- 1.3 The Commission has analysed the conditions of work in the unorganized sector with the objective of proposing a set of measures to bring about a sustained improvement in their wellbeing. In its Report on Working Conditions and

- Improvement of Livelihoods of Unorganised Workers (NCEUS 2007a) has drawn attention to the living and working conditions of marginal and small farmers. These workers have low incomes, often less than their meager consumption expenditure, an important part of which is derived from agriculture. The Commission has shown that the productivity on marginal and small farms is not less than that of large farms and that currently marginal-small holdings contribute about half the total agricultural production.
- 1.4 The Commission noted that currently a number of constraints were operative on agriculture creating distress conditions in several parts of the country. Foodgrain and agricultural growth remained very low during 1997-98 and 2003-04. The impact of the crisis was felt most acutely by marginal-small farmers. The Commission's analysis also showed that, in a period in which the role of public policies and programmes had shrunk, government intervention had not been able to overcome the inherent diseconomies faced by marginal-small farmers and they had been able to reap even smaller benefits from government programmes than the larger size-categories of farmers. It also pointed out that the inherent disadvantages faced by these farmers would be larger with increasing market integration and globalization, requiring new institutional approaches such as the formation of producer groups. The Commission therefore recommended a focused approach towards marginal-small farmers and recommended a package of measures.

- 1.5 The Eleventh Plan of the GOI has also recommended a similar approach: "The agricultural strategy must focus on the 85 per cent of farmers who are small & marginal, increasingly female, and who find it difficult to access inputs, credit and extension or to market their output. While some of these farmers may ultimately exit from farming, the overwhelming majority will continue to remain in the sector and the objective of inclusiveness requires that their needs are attended to." (Planning Commission 2007d)
- 1.6 Although, agricultural growth has revived in recent years, both as a result of revival of public policy focus on the sector, reflected in improved public investment by Centre and states, as well as upturn of prices, the systemic causes of low growth still need to be addressed. This requires addressing the constraints being faced, or likely to be faced in the emerging scenario, given that these farmers contribute to half of agricultural output. Moreover, this has to be done in a way such that these farmers can partake in the benefits of agricultural and overall growth. This requires, in the Commission's view, a targeted programme for marginal and small farmers.
- 1.7 This report analyses the status and constraints faced by marginal and small farmers and focuses on the need for a special programme which aimed at capacity

- building of these farmers, both for farm and non-farm activities.
- 1.8 As with earlier reports, the preparation of this Report went through a series of consultations. Two meetings were held with an Expert Group to discuss earlier drafts. The Composition of this Group is given in Annexure 3. The Draft Report and recommendations were also discussed with the Commission's Advisory Committee, whose composition is given in Annexure 4, and with the Planning Commission and the Ministry of Agriculture and Cooperation. Discussions were also held with some of the State governments during visits of the Commission. The feedback and comments received have been carefully considered in the preparation of the final Report.
- 1.9 After the introductory chapter (Chapter 1), Chapters 2 and 3 of this Report discuss the changing dimensions of marginal and small farming in India and the issues confronting these farmers. Chapter 4 describes the scope of past and recent initiatives while chapter 5 outlines the Commission's earlier recommendations. Chapter 6 discusses the experience of group approaches and the concluding chapter (Chapter 7) puts forward the elements of a Special Programme for marginal and small Farmers.

Dimensions of Marginal/ Small Farming in India

- 2.1 An overwhelming proportion of farmers in India are marginal or small. At all India level, more than 80 per cent of the farmers belong to marginal and small farm size groups, owning or operating less than 2 hectares of land. These two farm size groups' also account for a large proportion of the total farm households in most of the states.
- 2.2 Due mainly to sub-division of landholdings and other processes such as land distribution, their percentages show an increasing tendency over time (Table 2.1). The percentage
- of marginal farmers has gone up from nearly 38 per cent in 1953-54 to about 70 per cent in 2002-03.
- 2.3 There has also been an increase in the percentage area owned by marginal and small farmers. In 1953-54, marginal farmers owned only about 6 per cent land. But by 2002-03, they owned about 23 per cent of land. The share of marginal and small farmers in owned land went up from 16.3 per cent in 1953-54 to 43.5 per cent in 2002-03 (Table 2.1).

Table 2.1: Size Distribution of Ownership Holding -All India

		Per	centage C	wnership l	holdings			I	Percentage	area owne	d	
Land Class	1953-54	1961-62	1971-72		1992:	2003	1953-54			1982-83	1992	2003
Landless	23.1	11.7	9.6	11.3	11.3	10.0	0.0	0.0	0.0	0.0	0.0	0.0
Marginal	38.2	48.4	53.0	55.3	60.6	69.6	6.2	7.6	9.8	12.2	16.9	23.1
Small	13.5	15.1	15.5	14.7	13.4	10.8	10.1	12.4	14.7	16.5	18.6	20.4
Semi-Medium	12.5	12.9	12.0	10.8	9.3	6.0	18.4	20,5	21.9	23.4	24.6	22.0
Medium	9.2	9.9	7.8	6.5	4.5	3.0	29.1	31.2	30.7	29.8	26.1	23.1
Large	3.6	2.9	2.1	1.4	0.9	0.6	36.1	28.2	22.9	18.1	13.8	11.6
All Size	100	100	100	100	100	100	100	100	100	100	100	100

Note: Landless (< 0.01 ha), Marginal (0.01 - 1.00 ha), Small (1.01 - 2.00 ha), Semi-Medium (2.00 - 4.00 ha), Medium (1.00-10.00 ha), Large (>10.00 ha)

Source: NSS on Land Holdings 8th, 17th, 26th, 37th, 48th and 59th Rounds

- 2.4 A similar pattern in the land distribution is discernible in case of operational holdings. By 2002-03, the marginal and small farmers accounted for nearly 80 per cent of operational holdings as compared to about 61 per cent of 1960-61. Similarly the area operated by marginal and small farmers has increased from about 19 per cent in 1960-61 to 44 per cent in 2002-03 (Table 2.2).
- 2.5 The share of marginal and small farmers has thus seen substantial increase over period of time, not only in terms of numbers of farmers and holdings but also, more significantly, in terms of owned and operated area. The small holding character of Indian agriculture is much more prominent and pertinent today than ever before.
- 2.6 Though marginal and small farmer households' account for more than 80 per cent of the total farmer households, their share in total operated area is only a little more than 43 per cent (Fig. 2.1). On the other hand, medium and large farmers who account for less than 6 per cent of the farmer households, operate more than one-third of the total operated area. As a result, inequalities in land ownership remain quite large. It can also be seen that while semi-medium and medium farmers have been, more or less, able to retain their share in land, it is the farmers in the largest size category (> 10 ha) whose numerical share, as well as share in land owned/operated that has declined over time.

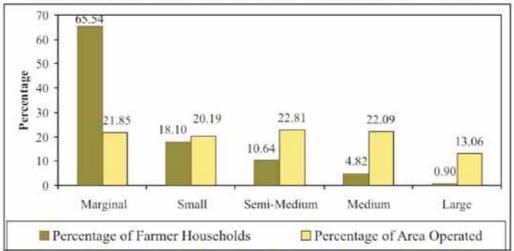
Table 2.2: Changes in Percentage Distribution of Operated Area by Category of Operational Holdings -India (Rural)

	Percentage distribution of operational holdings				Percentage distribution of operated area			
Land Class		81-82		2002-03*	60-61	81-82		2002-03*
Marginal	39.1	45.8	56	62.8	6.9	11.5	15.6	22.6
Small	22.6	22.4	19.3	17.8	12.3	16.6	18.7	20.9
Semi-medium	19.8	17.7	14.2	12	20.7	23.6	24.1	22.5
Medium	14	11.1	8.6	6.1	31.2	30.1	26.4	22.2
Large	4.5	3.1	1.9	1.3	29	18.2	15.2	11.8
All size	100	100	100	100	100	100	100	100

Note: * refers to kharif season.

Source: NSSO on Land Holdings 8th, 17th, 26th, 37th, 48th and 59th Rounds

Fig 2.1: Percentage Distribution of Farmers' and Area Operated - All India



Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003

2.7 The regional variations in the distribution of marginal and small farmers as well as the land they possess are given in Figure 2.2 and Appendix Tables A1 and A2. The combined percentage of marginal and small farmers ranges between 65 to 95 per cent in the major states.

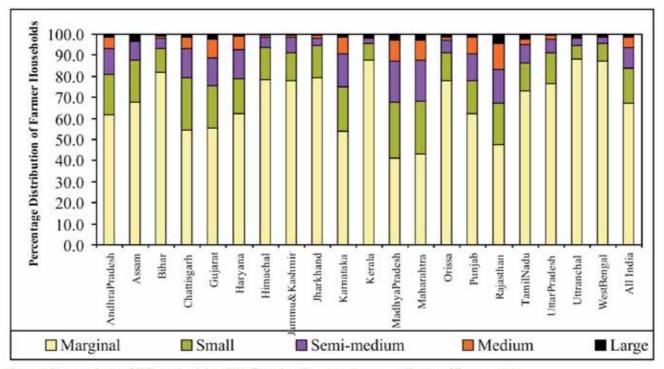


Fig. 2.2: Percentage Distribution of Farmer Households

Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003

A number of significant observations can be made on the basis of these statistics. First of all, marginal and small farmers as a group outnumber the rest of the farmers in all states. In twelve out of 27 states marginal and small farmers constitute the overwhelming majority of farmers of 90 per cent or above. While marginal and small farmers outnumber the medium and large farmers in all states, in 17 out of 27 states they also account for more than 50 per cent of the land possessed for cultivation. As we shall see later, marginal and small farmer dominated states in terms of both number of farmers as well as land possessed do not necessarily show a lower value generated per unit of land. In fact, in seven out of ten high ranking states with the highest value generated per unit of land are those dominated by marginal and small farmers in terms of land possessed for cultivation.

2.9 With the group of marginal and small farmers, marginal farmers outnumber small farmers ranging from2:1 in states with low incidence of marginal and small

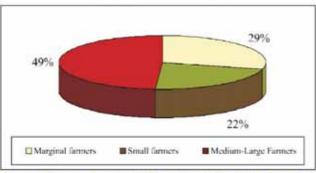
farmers to as high as 18:1 in Tripura, 12:1 in Uttaranchal and around 10:1 in West Bengal, and Kerala and close to 8:1 in Bihar. The predominance of marginal farmers is significant in the sense that farming then becomes only one of the sources of livelihood of these households, often much more than that of small farmer households. A foothold in land cultivation is seen to be so crucial by these households for the security it provides in terms of food, some collateral and a source of employment when alternative opportunities become so far and few. The importance of a livelihood approach to the marginal and small farmers can hardly be underrated.

Contribution to Over-all Production

2.10 While the earlier discussion highlights the preponderance of marginal and small farming, both in terms of number and area possessed, we highlight here the share of the marginal and small farmers in the total output. It is important to note that the smallholders' contribution to the total value of crop output exceeds 50

per cent nationally although the share of land possessed is somewhat lower at 46 per cent (Figure 2.3).

Figure 2.3: Share of Marginal and Small and Large Farmers in Total Output



Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003

2.11 Only ten states show the contribution of marginal and small farmers at less than 50 per cent of output. It varies widely across states, ranging from about 19 per cent in Punjab to 86 per cent in West Bengal. It is less than half the total output in only a handful of states in the North-west (Punjab, Haryana and Uttarakhand), Centre-West (Rajasthan, Gujarat, Maharashtra and MP) and South (AP and Karnataka) (Appendix Table A3). But their share in production is often higher in proportion to their share in operational crop land.

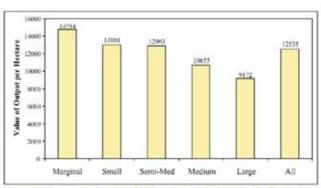
2.12 Thus it can be seen that the importance of marginal and small farms varies significantly between regions and states. In the eastern states, these farms form not only an overwhelming proportion of all farms but also account for most of the area as well as production. In the Central, Western and North-western regions, medium and large farms are still dominant in terms of area and also in production. It is also pertinent to note that some of these regions lack irrigation and are rainfed, and so farm productivity is also low.

Productivity Levels

2.13 The value of output per hectare on small farms is, in general, still not less than that on large farms. Small farm are characterized by smaller applications of capital, but higher application labour and other inputs, especially owned ones, generally higher index of cropping intensity and diversification. With appropriate institutional support including credit, it has been possible for small farms to catch up and in some cases; even surpass large farms in use of the HYV and other land augmenting technology.

2.14 There has been almost half a century of high quality research in India on the relationship between farm size and productivity. It was widely believed, at least since the 1970s, that the advent of new technologies, requiring higher doses of capital, would obliterate any advantage that small farms might have had. But the 59th Round Farmers' Survey has empirically established that small farms continue to be produce more (in value terms) per hectare than their larger counterparts in the country as a whole (see Fig 2.4) as well as in most parts of the country (Appendix Table A4).

Fig 2.4: Value of Output per Hectare (Rs.) 2002-2003



Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003

2.15 It is another story that higher yields on small farms are, in most cases, not enough to compensate for the disadvantage of the small area of holdings - partly also due to high costs of production per unit. Therefore, the disparities in absolute incomes between various farm sizes are found to be very high and may have increased over time.

3

Key Issues and Problems of Marginal and Small Farmers

- 3.1 The important issues confronting farmers in India have been analysed in depth by the National Commission of Farmers (NCF) and the GOI has consequently adopted a National Policy for Farmers (NPF) (GOI 2007b). Subsequently, the Government of India has also drafted an Action Plan detailing the role of the Ministries and departments in implementing the National Policy. The point of departure of the National Policy is that instead of taking a sectoral view, it deals with the problems of Indian farmers and suggest a way forward which is consistent with ecologically sustainable growth of agriculture as well as the improved wellbeing of farmers. As far as this report is concerned, we are in substantial agreement with the approach of the NPF but we focus on a segment of farmers, for the reasons elaborated in this report.
- 3.2 The small land and asset base of marginal-small farmers which leads to small and inadequate incomes is compounded by a number of other factors. Some of general issues that confront marginal-small farmers as agriculturalists are: imperfect markets for inputs/product leading to smaller value realisations; absence of access to credit markets or imperfect credit markets leading to sub-optimal investment decisions or input applications; poor human resource base; smaller access to suitable extension services restricting suitable decisions regarding cultivation practices and technological know-how; poorer access to

- "public goods" such as public irrigation, command area development, electricity grids; greater negative externalities from poor quality land and water management, etc. Many of these issues are brought out by the Farmers Survey and the Cost of Cultivation Studies and are discussed below. Some of the same issues (low asset base, poor human resource base) also restrict the marginal and small farmers' access to remunerative nonfarm incomes.
- 3.3 Recent evidence also suggests that, in many cases, their situation has worsened over time. Increasing globalisation has added an international dimension to the problems faced by these farmers. The policies of huge subsidies and protectionism, widely practised by industrialised countries, often have a negative effect on small farmers in developing countries. Nearly all industrialised countries, though having a very small proportion of their population in farming, can go to great lengths to protect their agriculture. Such policies have a devastating effect, among others, on farmers in developing countries as well as the international environment (natural, economic, political and social).
- 3.4 In the absence of proper steps, the future of these farmers seems to be very bleak. This section draws attention to some of the key issues affecting marginal and small farmers in India today.

Increasing Role of Women in the Farming Community

- 3.5 Till recently, little attention was paid to the role of women in the farming community, Women's work in the farmer households was seen as mainly supplementing the work of males, who also took all major decisions. This perception has changed principally because it is recognized that due to the movement of men out of agriculture, women farmers are often the principal (and sole) decision-makers in the household.
- 3.6 From Table 3.1 and 3.2, it can be seen that nearly 40 per cent of farmers in India are women. This holds for all size categories. In animal husbandry more than three-fifth of the workers are women, whereas in forestry/ plantation activities, a majority of workers are women.

Table 3.1: Share of Female in Total Persons Engaged in Farming by Size Class of Own Land

Nature of work	Marginal	Small	Large	Total
Cultivation	38.4	38,3	38.5	38.4
Forestry / Plantation	54.7	51.6	55.1	54.2
Animal Husbandry	60.7	63.1	64.7	61.9
Total	40.2	39.6	40.6	40.2

Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003

3.7 The NSS employment Rounds which classifies a person as a cultivator only if he or she is principally employed as one, show that the percentage of women among the cultivators increased between 1993-94 and 2004-05 and was also comparatively the highest among marginal land owners.

Table 3.2: Percentage of Women among All Cultivators, by Land Size Class

Land Class	1993-94	2004-05
Marginal	36.7	38.7
Small	32.1	33.4
Large	32.9	34.5
Total	34.1	36.1

Source: Computed using NSS unit level data 50th and 61st Rounds on Employment and Unemployment Situation in India 3.8 One of the critical issues that has arisen is that land often continues to be in the names of the male members and women farmers are not able to derive their due entitlement as farmers. The Farmers' survey shows that women farmers have smaller access to credit from formal institutional sources and to extension services than male farmers. The Eleventh Plan Sub-Group on Gender and Agriculture (Planning Commission 2007a) has highlighted the role of women in crop cultivation, agroprocessing, livestock dairying and collection of NTFP. It has noted that both in crop agriculture as well as livestock development, training programmes are designed primarily for men. Since women do not usually have ownership rights, the Report has called for promoting such rights through joint ownership and pattas, as well as other forms of production such as tree pattas and cooperative model of production which give women greater control. The report also calls for giving women farmers Kisan Credit Cards on the basis of the joint pattas. All this calls for policies and programmes and innovative institutional approaches that are sufficiently gender sensitive. This is also recognized in the Eleventh Plan.

Social Identity and Farming

3.9 We have seen in the Commission's Report on Conditions of Work that certain social groups, particularly SC and ST, predominate in the labour market. This is a result of a historical denial of land and cultivation rights to those who were at the bottom of the social pyramid, even though happened to play a very important role as direct producers. Currently also there is great asymmetry in the ownership and operation of land, as shown in Table 3.3.

Social Group	Semi-Marginal & Marginal	Small	Marginal & Small	Medium& Large	Total
sc	21.6	10.3	19.3	7.8	17.5
ST	12.4	15.6	13.0	14.9	13.3
OBC	41.8	41.8	41.8	39.7	41.5
Others	24.1	32.3	25.7	37.5	27.6
Total	100	100	100	100	100

Table 3.3: Distribution for Social Groups of Farmer Households by Land Size Category, 2003

Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003

3.10 While the largest percentage of farmer households belong to the OBC category (forty-two per cent), followed by others (twenty-eight per cent). SC and ST together constitute thirty-one per cent of the farmer households. However, the SCs in particular have more than half of their holdings of less than half a hectare. While the distribution of land ownership among ST households appears to be better, this picture is more apparent than real, since the quality of their land is probably of the lowest quality – a fact corroborated by the high incidence of poverty and dependence on wage labour among land owning ST households.

3.11 In the Report on Conditions of Work and Promotion of Livelihoods in the Unorganised Sector, the NCEUS had shown that access to the quantum of land is an important determinant of access to economic resources such as credit as well as the outcomes in terms of income and poverty status. Further, the social identity of farmers is also seen to mediate access to economic resources and outcomes. Thus higher social status meant better outcomes across the size class of land possessed. The relationship between poverty and land possessed as mediated by social identity is shown in paras 3.30 to 3.34. Such findings pose additional challenges beyond the economic dimensions of the farmers' status.

3.12 Further the evidence provided in this Report suggests that even after accounting for the quantity and quality of land owned by the socially deprived groups, their access to credit, information, publicly provided inputs and extension services is lower, indicating that they possibly suffer from discrimination in the delivery of public services. Notably, a few studies have argued that socially deprived groups also suffer from market based discrimination, which one hopes that state policy and programmes would help to compensate. Together, these

factors account for the lower levels of living of farmers belonging to these groups, pointing to the need for concerted multi-faceted attention.

Land Reform and Land Rights

In its Report on Conditions of Work, this 3.13Commission has argued that there is strong evidence that relatively successful implementation of even a modest package of land reforms dramatically improves the prospect of the poor. Poverty in rural areas is associated with landlessness and comparatively successful, although modest, land reforms are able to unleash the productive potential of the rural economy and reduce poverty. There is, thus, in our view, a strong continuing case for redistributive land reforms viz. one which improves the access of the rural poor to land through expropriation and distribution of ceiling surplus lands and cultivable wastelands (with priority being given to homestead land), tenurial reform and better operation of the land-lease market and the land sales market. The latter will help to align the ownership and control of land to the actual cultivators, improving cropping intensity and the efficiency of cultivation.

3.14 We have further argued that these reforms will succeed in their intent only if supportive policies and institutions are in place, which allows the rural poor to access new technologies and economies of scale in marketing, wherever necessary. Moreover, there are important gender concerns in land reform. Although land legislations have been amended in several states to remove the gender bias, but a number of issues remain. Moreover, improving women's access to land and assets is also linked to other cultural norms and practices, which need to be simultaneously addressed. In some states, self-help groups have provided other mechanisms to improve women's

access to land (through individual or joint leasing and cultivation of land), which needs to be carefully nurtured.

As far, as marginal-small farmers are concerned, 3.15 they own/cultivate some land. Indeed, land is the most limiting factor, in the resource structure of a small farmer. Its efficient use is facilitated if the farmer either owns it or has a security of tenure i.e. is assured that he would continue to cultivate it in the foreseeable future. However, informal tenancy is still widely prevalent in India, although its incidence varies from region to region. A large percentage of farmers lease-in land in order to augment their holdings. Under the tenancy laws, which followed the Abolition of Intermediary Acts promulgated after Independence, most states abolished leasing, except for a very small category of households which were legally permitted to lease-in or lease-out. A very small number of states have relatively liberal land lease laws. Because of the pressure on land, landless and poor tenants continued to lease-in land, but remained unrecorded tenants, without security of tenure and without the benefit of rent regulation. Tenancy reforms have had the perverse impact of driving tenancy underground, and making it more difficult for tenants to lease land on secure and reasonable conditions. One consequence of this is that there is a wide discrepancy between the extent of tenancy reported in large-scale surveys such as the NSS and more in-depth micro surveys. In 2002-03, the NSSO reported that 6.5 per cent of operated area was under tenancy, with states such as Punjab, Orissa, West Bengal, Bihar, Uttar Pradesh and Andhra Pradesh recording higher than average tenancy (Appendix Table A5).

3.16 From the very beginning, tenancy conditions in India have differed between the usually arid and semiarid regions where the land-man ratio was favourable and extensive cultivation was practised, and the other regions, where there was more intensive cultivation. In the former areas, often very small landowners preferred to lease-out land to bigger cultivators. For policy purposes, therefore, one has to recognise that the tenants are differentiated because they face different conditions and levels of insecurity. At the same time, tenants as a class also face some common issues mainly due to the difference between their de jure and de facto statuses. Besides the usual risks and problems faced by other

cultivators, tenant cultivators have the additional burden of high rents. Due to the lack of documentary proof, as it is merely a verbal agreement, the tenants are deprived of any tenancy rights. This increases the hardships of tenant cultivators as lack of documentary proof keeps them outside the ambit of formal delivery system denying them access to critical inputs such as credit. Thus, rising costs of inputs and enhanced rents along with the high costs of informal leasing increases the vulnerability of the group. Studies of agrarian distress in the recent past indicate that marginal and small tenants are an especially vulnerable class, as rents in the areas of commercial agriculture go up to reflect high profitability in good years, but constitute a heavy burden in the years of distress.

3.17 We have already pointed out that most tenancies are unrecorded. The share of recorded tenancy is almost negligible, 0.74 per cent in 2003, which has declined from 1.31 per cent in 1991-92. This goes to show that the tenant cultivators are highly vulnerable. It is clear that a new round of tenancy reform should be high on the policy agenda. The Tenth Plan and the Eleventh Plan have already suggested that tenancy should be legalised subject to the ceiling limit already specified in law, security of tenure should be encouraged and the new law should protect the rights of both landowners and tenants. At the same time, as we have pointed out in our earlier report, banks should not insist on copies of land records for credit purposes.

3.18 Therefore an important issue and an as yet incomplete agenda in agrarian reforms is one of tenancy security. This should be seen as a basic requirement for both livelihood security of poor farmers as well as agricultural development especially in a situation where the employment transformation to non-agricultural employment has been quite slow. In any case, the addition to the rural labour force will be quite significant as to warrant an intensification of employment creation in the non-farm sector. The issue of insecurity of tenants vary across states but its incidence is greater in eastern and central India (Bihar, Eastern Uttar Pradesh, Madhya Pradesh, Chattisgarh, Jharkhand and Orissa) such that these states need to take it up on a priority basis.

3.19 Apart from tenancy, the other constraint faced by these farmers is that even where they own land the

record of rights is not updated and mutations in land records are not duly recorded. With computerisation of land records, and making information regarding record of rights easily available through internet kiosks, states such as Karnataka and Andhra Pradesh have tried to reduce transaction costs in farmers obtaining copies of land records and speedy mutations. But so far this is only a first step.

3.20 One of the objectives of the Special Programme being proposed by this Commission would be to see that tenants are able to circumvent the constraints posed by oral tenancy. Further, the programme would also try to ensure that poor farmers, especially women, can collectively lease and cultivate land, both private and communal.

Low Level of Formal Education and Skills

3.21 Low literacy, lack of organisation and poor connectivity lead to low levels of awareness among farmers, regarding technology usage, institutional credit schemes and sources and the government's support initiatives. There is enough evidence to suggest that the size of farmers' holdings and level of formal education are positively correlated. Since small farmers are far behind in terms of formal education, they are inherently at a greater disadvantage (Table 3.4).

households. According to the 61st Round NSS survey, only 1.6 per cent youth (15-29 year) in farmer households had formal skills. This percentage was lower for agriculture labour households (1 per cent) but higher for other labour households (2.2 per cent) and much higher for 'other' households (6.5 per cent). When formal and informal skills are considered together, 8.2 per cent in marginal farmer households and 8.6 per cent in small farmer households had any skills, compared to 11.8 per cent for medium-large farmer households, 9 per cent in rural non-agriculture self-employed and agriculture labour households, 9.3 per cent in other labour households, and 11.4 per cent in other rural households. This limits the chances of farmer households to pursue remunerative non-agricultural vocations.

3.23 It is quite important for farmers, especially marginal and small farmers, to have a reasonable level of awareness regarding the environment in which agricultural production is take place including the provision of agricultural services if these farmers are to acquire a minimal degree of confidence and control over public and collective goods that are made available by public agencies. The low level of formal education noted above and limited public dissemination of knowledge however severely limits the farmers' awareness. As per the Farmers' Survey, at the all India level, only 18 per

Table 3.4: Literacy and Mean Years of Education of Unorganised Agricultural Self-employed Workers, 2004-2005

Land Size/Class		Literacy Rate		Mean Years of Education			
	Mule		Total	Mule	Female		
Landless	45.6	25.5	34.0	2.2	1.5	1.8	
0.01-0.40 ha	59.2	31.1	43.7	3.7	1.7	2.6	
0.41 - 1.00 ha	64.5	31.7	51.4	4.1	1.7	3.2	
Marginal	62.5	31.2	48.1	3.9	1.7	2.9	
Small	68.7	34.8	55.9	4.7	1.9	3.6	
2.00 - 4.00 ha	70.2	37.1	57.6	4.9	2.1	3.8	
> 4.00 ha	77.4	42.0	63.3	5.8	2.5	4.5	
Medium & Large	72.9	39.0	59.7	5.3	2.2	4.1	
All	67.4	34.1	53.4	4.5	1.9	3.4	

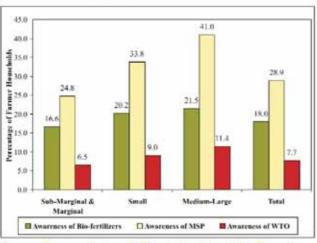
Source: Computed using NSS unit level data 61st Round on Employment and Unemployment Situation in India

3.22 Low levels of formal education and awareness are reinforced by low skill levels among farmer

cent of the farmers were aware of bio-fertilisers, 29 per cent are aware about the Minimum Support Price (MSP) and only 8 per cent of the farmers have heard of World Trade Organisation (WTO.)

The level of awareness among farmers of bio-3.24 fertilizers, MSP and WTO is directly related to land size as well as to social background of the farmers. Only a little more than a quarter of the marginal and small farmers reported awareness of MSP and this increased with higher social status groups. This is also the picture among medium and large farmers where the average is 41 per cent. In some other respects, the level of awareness was so low as to wonder whether at all public programmes disseminate their information in any meaningful sense. Only seven per cent of marginal and small farmers have heard about WTO while it was around 11 among medium and large farmers. However, social status made a big difference. Only around 4 per cent of ST and SC marginal and small farmers seemed to know about WTO while it was around 12 per cent among Others. In any case, only 8 per cent of all farmers have heard about WTO. Awareness of bio-fertilizers, which is increasingly being propagated on grounds of sustaining soil health and quality, 17 per cent of marginal and small farmers reported to be aware (Fig. 3.1). But here again there is a social gradation with only 13 to 15 per cent of STs and SCs reported to be aware whereas 21 per cent of Others reported themselves to be aware. In any case, the overall awareness among all farmers was only 18 per cent.

Fig. 3.1 Percentage of Farmer Households with Awareness of Bio-fertilizers, MSP, WTO by Size of Holdings, 2003



Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003 3.25 As noted earlier, awareness levels are related to educational levels. Indeed, awareness levels about biofertilisers, MSP, WTO etc. is clearly shown to be associated with educational levels across States. The states of Kerala, Tamil Nadu and Punjab reported high awareness levels about these issues (Appendix Table A6).

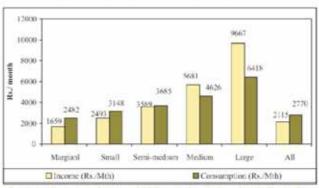
Farmers' Income, Consumption and Poverty

3.26 Fig 3.2 shows the average monthly income and consumption across different size class of landholdings. The average monthly income of farmer households is comprised of income from wages, net receipts from cultivation, net receipts from farming of animals and income from non-farm businesses. The average monthly consumption of farmer households is comprised of total food and non-food expenditure.

3.27 The average monthly income of all farmers at all India level is estimated at Rs. 2115. This monthly income ranges from Rs.1659 for marginal farmers to Rs. 9667 for large farmers. Consumption expenditure of marginal and small farmers exceeds their estimated income by a substantial margin and presumably the deficits have to be plugged by borrowing or other means.

3.28 The state level figures which show the variations across states in income and expenditure of farmers in different size classes are given in the Appendix Table A8¹.

Fig 3.2: Monthly Income and Consumption Expenditure of Farmers, 2002-2003



Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003

3.29 Given this scenario which shows a correlation between expenditure deficit and land size, poverty levels among marginal and small farmers is high.

3.30 Moreover, poverty and social identity are also correlated. Table 3.5 gives the incidence of poverty for socio-religious groups and land size.

Appendix table A7 gives state wise comparison of the net Farm Income per hectare also.

Table 3.5: Poverty Ratios among Farmers by Socio-Religious Groups and Land [Possessed]
Size Classes, Rural 2004 - 2005

Land Size (ha) STs	Hindu SCs	Hindu OBCs	Hindu Upper	Hindu Castes	Muslims Religions	Other	All
<0.01	68.4	29.1	18.1	1.6	4.7	26.6	22.0
0.01 - 0.4	41.5	24.8	18.8	10.3	23.1	10.2	20.2
0.4-1.0	34.4	21.5	17.5	6.4	19.5	17.6	18.1
1.0-2.0	33.2	18.0	12.3	6.9	12.1	16.8	14.8
>2.0	29.7	14.5	6.8	6.1	7.1	6.4	9.8
All	33.3	20.8	13.0	6.9	16.4	12.6	15.2

Note:

1. Poverty ratios are computed for workers in the unorganised sector.

2. Cases with unspecified land possessed have not been included in any class but included in All.

Source: Computed using NSS unit level data 61st Round on Employment and Unemployment Situation in India

- 3.31 The table conveys a number of important aspects of this caste/class combination in rural India. First, in every size class of land ownership, there is a hierarchy in terms of poverty status. The bottom layer is constituted by the STs, followed by SC, Muslims, Hindu OBC and then Others (who do not belong to any of the earlier groups). Second, the condition of the STs is much more intense (in terms of poverty) as compared to even SCs. Third, while the overall condition of Muslims lags behind that of OBCs, this is primarily the case for the marginal farmers and does not systematically hold for all size classes.
- 3.32 The STs landless farmers had an overwhelming poverty ratio of 68 per cent. Overall also, these farmers are the most vulnerable with one-third of them being in poverty. The ST farmers eke out a living probably by cultivating poor quality land and collecting non-timber forest products. Even those among them possessing more than two hectares of land showed a high incidence of poverty.
- 3.33 About one-fifth of the SC self-employed agricultural workers are in poverty and 16 per cent of the Muslims. The upper caste Hindus were the least likely to be in poverty. Poverty levels among SC households were higher than those for OBCs and Upper Castes in

all comparable land size classes. The landless among the Upper Castes and Muslims clearly had access to nonagricultural sources of income, reducing their poverty levels.

3.34 It is evident that the small and marginal farmers are economically worse off. But here again, there is differential incidence of poverty mediated by one's social identity. Size of land does help reduce poverty but there are other factors that have to do with one's social position to translate the asset position into one of wellbeing. Social networking and education could be among them. Those belonging to SCs and STs are especially vulnerable even among these group of farmers.

Credit and Indebtedness

3.35 Small and marginal farmer households need credit to meet both consumption needs to maintain subsistence levels as well as for production purposes to meet the increasing costs of cultivation. Increased indebtedness is noted as a major reason for the spurt in farmer suicides during recent times across a number of states. Many states including Punjab, Andhra Pradesh, Karnataka, Maharashtra and Kerala have recorded a spurt in distress driven suicides among farmers. In most, if not all, such cases, the economic status of the suicide victim was very poor, being small and marginal farmers. After

the Green Revolution agricultural activities have become cash based individual enterprises requiring high investment in modern inputs and wage labour. This is evident from the list of states with high incidence of farmer suicides, which are not necessarily backward or predominantly agrarian or with low income. A common feature that we discern is the high level of commercialization of agriculture and the trend towards cash crops in these states. Increased liberalisation and globalisation have in fact lead to a shift in cropping pattern from staple crops to cash crops like oilseeds and cotton, requiring high investment in modern inputs and wage labour, and increasing credit needs but when the prices declined farmers had no means to supplement their incomes. When crops failed and or prices went down they had no means to repay the loans. Further, unlike the industrialists, farmers do not have access to debt relief under any law. Being indebted to the private moneylenders they cannot go to public authorities to declare themselves insolvent or to get any kind of debt relief. In most cases the suicide victims were small and marginal farmers who could not sustain frequent price shocks. With mounting debt burden along with the rising risks in production and price fluctuations leading to low remuneration, it is no wonder that a lot of distress is generated among the farmers.

3.36 As the recently appointed Committee on Financial Inclusion (constituted in June 2006) has pointed out, loans outstanding against a particular household have both positive (it can be an indicator of financial access) and negative ramifications (it can be an indicator of debt burden). About 48 per cent of farmer households had loans outstanding in 2002-03 (Based on Situation Assessment Survey of Farmers 2003). Incidence of indebtedness among farmer households was the highest in Andhra Pradesh (82 per cent), followed by Tamil Nadu (75 per cent) and Punjab (65 per cent).

3.37 Prevalence rate for formal sources among marginal and small farmers are much lower than for large farmers, while in the case of informal sources the reverse is true (Table 3.6). The medium and large farmers have better access to institutional sources as they are better endowed in terms of assets to offer as collaterals for loans than marginal and small farmers².

Table 3.6: Prevalence Rate of Indebtedness by Farm Size, All India (Percentage) 2003

Land Size (ha)	Formal	Informal	Both	Total
<= 0.40	12.7	30.3	3.5	46.5
0.41 - 1.00	18.8	21.7	4.6	45.0
1.01 - 2.00	25.9	17.9	7.0	50.8
> 2.00	34.7	14.4	8.6	57.8
Total	20.4	23.0	5.3	48.6

Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003.

3.38 Institutional sources account for more than half the outstanding loans in the case of all categories of farmers, other than sub-marginal ones (Table 3.7). Among the formal sources, banks and co-operatives are the most important. The importance of institutional sources increases with farm size. But moneylenders continue to be a very important source of loan among all categories, and account for a third of the total quantum of loans to sub-marginal farmers. Fig 3.3 shows the share of Institutional and Non-institutional Sources in Total Outstanding Loan of Farmer Households state wise.

Table 3.7: Percentage Distribution of Outstanding Loans by Farm Size & Sources (2003)

Source of loan	Size Cla	ss of Land P	ossessed	(hectares)
	>=0.40	0.41-1.00	1.01	Above
				2.00
Government	3.9	3.8	1.7	1.4
Co-operative society	14.1	17.0	20.5	22.8
Bank	24.4	32.0	35.4	42.6
Total: Institutional	42.4	52.8	57.6	66.8
Agricultural/				
professional				
moncylender	32.4	30.8	25.9	20.0
Trader	4.9	4.6	4.2	6.0
Relatives & friends	15.2	9.1	8.8	5.2
Doctor, lawyer &				
other professionals	1.4	0.7	0.8	0.8
Others	3.6	2.0	2.6	1.2
Total: Non-				
Institutional	57.6	47.2	42.4	33.2

Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003.

² Andhra Pradesh, Tamil Nadu, Punjab and Kerala have the highest indebtedness among farmer households across all land sizes (Appendix Table A9). While Kerala has higher incidence of indebtedness among the sub-marginal and marginal farmers, it is higher among the larger farmer households in Gujarat, Maharashtra and Madhya Pradesh. In the poorer states of Assam, Bihar and Jharkhand the overall indebtedness was low and tends to be concentrated among the marginal farmers.

100.0 90.0 80.0 70.0 Percentage 60.0 50.0 40.0 30.0 20.0 10.0 0.0 Bihar ammu&Kashmir Himachal Kerala **TamilNadu** All India Gujarat Punjab Assam Karnataka Chattisgarh harkhand Maharahtra Orissa Rajasthan Uttranchal WestBengal AndhraPradesh Haryana MadhyaPradesh JttarPradesh ■ Non-institututional Institutional

Fig 3.3: Share of Institutional and Non-institutional Sources in Total Outstanding Loan of Farmer

Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003

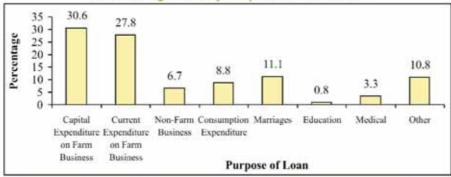
3.39 Given their economic conditions, the poorer farmers, with no collateral to offer in lieu of loans and with incapacity and difficulty in following the required procedural formalities to access formal sources, these farmers prefer to approach the easily reachable informal sources such as private moneylenders and traders. This increases their vulnerability and also checks their entrepreneurial initiatives to invest in agriculture to increase productivity and income levels.

3.40 Our direct estimates shows that of the total loans outstanding from formal sources in 2002-03 (Rs. 50125 crores), the group of farmers who cultivated less than 0.4 hectares of land (35.9 per cent of the total) had only 13.6 per cent of formal sector loans, while those who cultivated between 0.4 and 1 hectares of land (31.1 per cent of the total) availed 21.8 per cent of the loan. Small farmers (16.8 per cent) availed 19.4 per cent of the formal loans, while medium and large farmers (10 per cent and

6.2 per cent of the total respectively) availed 21.7 per cent and 23.4 per cent of formal loans respectively. The major credit constraint, therefore, appears to lie with the two-thirds of the farmers who are marginal landholders, possessing less than 1 hectares of land (NSSO 2005b).

3.41 As already mentioned, rising costs of cultivation and poor returns due to low profitability and viability of small farmers' operations have increased the indebtedness of farmers who require loans to meet both production and consumption needs. The average outstanding loan per farmer household was Rs.12585 in 2002-03. Expenditure in farm business (capital + current) accounted for 58 per cent of the total loan (Fig. 3.4). This was followed by marriages accounting for 11 per cent of the total loan and consumption expenditure at 9 per cent. The main purpose of debt in the case of farmer households is thus to meet the operational costs.

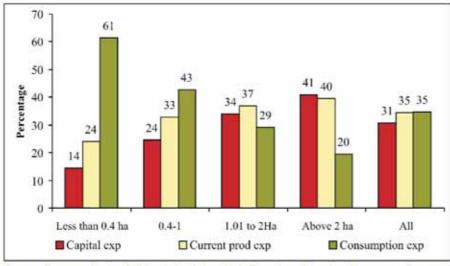
Fig 3.4: Percentage Distribution of Outstanding Loans by Purpose of Loan 2003



Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of related.

Farmers 2003

Fig. 3.5: Percentage Distribution of Outstanding Loans by Purpose & Land Size Classes 2003



Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003.

3.42 Loans for productive capital and current expenditure as percentage of total loans outstanding increase with farm size. The significance of loans for consumption and unproductive purposes such as marriages and consumption expenditure is higher among the marginal and small farmers (Fig 3.5).

3.43 The social-group wise picture in terms of access to credit and indebtedness demands closer analysis than existing data permit. ST farmer households have lowest access to formal credit (as shown by percentage of households with loans outstanding) complemented by very low access to informal credit, and low (cash) borrowing for consumption purposes. In short, the picture,

for them appears to be one of acute financial exclusion from both formal and informal sources. On the other hand, SC households show low access to formal credit, but the highest percentage among them are indebted to informal sources. Our analysis in the Conditions of Work Report clearly shows that social status and access to formal finance are clearly related.

Issues Relating to Land and Water Management

3.44 Land and water are the two critical resources for agriculture. The percentage of net area irrigated does not show any particular disadvantage accruing to small and marginal farmers. marginal and small farmers are concentrated in marginal and degraded lands, lands which are at the tail-end of canal systems, or in the upper reaches of watersheds. They also suffer more from flooding and seepage than the land belonging to medium-large farmers.

3.45 While large farmers capitalize on cheaper sources (e.g. higher percentage of irrigation

from canals which is a cheaper irrigation option while smaller farmers have to rent water). About 40 per cent of the irrigated area in the case of farmers above 10 hectares was from canals, it was less than 25 per cent in the case of marginal and small farmers.

3.46 This means that land improvement and water management programmes, and watershed schemes need to be properly designed so that they can have a positive impact on these farmers. But at the same time, if properly designed, these programmes can have a huge positive impact on marginal and small farmers. It is for these reasons that the Commission has called for giving the highest priority to such programmes.

Use of Farm Equipment and Modern Inputs

3.47 Input use to enhance productivity has greatly increased since the Green Revolution, which is also one of the reasons for increased cost of cultivation. While about 80 per cent of the farmers of all size classes used fertilisers, the use of organic manure, improved seeds and pesticides and veterinary services is still low (Table 3.8). Moreover, in each case, a smaller percentage of marginal and small farmers report usage compared to the medium and large land size farmers.

3.48 Table 3.8 shows that about 48 per cent of the farmer households made use of purchased seeds and 47 per cent used farm saved seeds. Seed replacement rates were found to be low. About 30 per cent farmers replaced seed variety every year and 17 per cent changed it after 4 years. Replacement rates were the lowest among marginal farmers. Only 24 per cent of the sub-marginal farmers and 29 per cent of the marginal farmers replaced seeds every year, compared to 40 per cent of the large farmers (NSSO 2005d).

Table 3.8: Percentage of Farmer Households Using Modern Farming Resources

Land Size (ha) Fertiliz	Fertilizer		Organic Manure		Improved Seeds		Pesticide		Veterinary Services	
	Rahi	Kharif	Rabi	Kharif	Rahi	Kharif	Rabi	Kharif	Rahi	
<=0.4	71.0	57.7	48.6	37.5	38.0	34.0	39.8	29.6	26.1	21.4
0.4-1	82.3	58.5	62.4	42.0	48.5	36.9	48.9	33.4	30.3	21.9
1-2	82.4	61.0	64.0	43.3	55.8	40.2	54.1	37.4	35.5	26.7
2-4	80.7	59.0	65.9	43.5	57.8	41.6	57.8	36.5	38.8	31.1
>4	75.7	56.6	67.0	42.5	63.6	42.0	56.4	38.8	44.3	31.7
Total	77.8	58.6	58.5	40.8	48.0	37.2	48.0	33.4	31.4	24.1

Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003.

- 3.49 Testing facilities for fertilizers and pesticides are hardly available to the farmer households. Only states like Punjab and Tamil Nadu reported some usage of such facilities.
- 3.50 With rampant adulteration seeds are often of poor quality. Similar has been the case with fertilisers and pesticides. Often farmers are also not aware of the correct proportions of fertilisers to be used. They depend on sellers or on the demonstration effect of large farmers. Incorrect usage of inputs and environmental hazards are the fallouts from such instances.
- 3.51 Timely availability of HYV seeds and usage of fertilizers and pesticides is also important to ensure a good crop. Farmers in general, and marginal and small farmers in particular, often face problems regarding easy and timely availability and quality of these inputs as also the costs and knowledge of use of these inputs in the right quantities. Among the various inputs (pesticides, fertilizers, HYV seeds, organic manure and veterinary services), only organic manure is most readily available within the village. In most cases the inputs are available

in the nearest large village which is more than 2-5 kms away. Farmer households have to travel more than 10 kms for seeds and pesticides.

3.52 The number of productive assets particularly mechanical equipment/implements and tractors are very low among smaller sized holdings. The small and marginal farmers thus have to rent such equipment, which adds to their cost of cultivation.

Access to Extension Services

3.53 The Eleventh Plan Steering Group on Agriculture (Planning commission 2007) has noted that technology has become a crucial constraint on growth of agriculture. It points to the two aspects of this constraint – development of new technologies and the gaps in the application of existing technologies. Extension services can serve as a critical tool in closing this gap. The Steering Group has noted that public extension services have become extremely weak. This conclusion has been echoed in a number of other reports including those by the National Farmers' Commission (2004).

³ Appendix Tables A11-16 present state wise share of farmers using Modern Farming Resources

Table 3.9: Access to Information on Modern Technology through Government Programmes/Institutions by Land Size Class, 2002-03

Source	<0.4hec	0.4-1hec	1-2hec	2-4hec	>4hec	Total
Participation in Training						
Programmes	0.5	0.8	1.2	1.7	2.2	0.9
Krishi Vigyan Kendra	0.4	0.6	0.8	1.1	1.5	0.7
Extension Worker	2.7	5.6	8.1	9.2	11.7	5.7
Government Demonstration	1.1	1.9	2.7	3.2	4.2	2.0
Any Government Source	**	5.4	8.9	12.5	2	7.2

Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003.

3.54 Nearly 60 per cent of the farmer households in India are not able to access any source of information on modern technology (NSSO 2005d). Among those who had accessed such information, the three main sources were other progressive farmers (16.7 per cent), input dealers (13.1 per cent) and the radio (13 per cent). Government agencies such as the Krishi Vigyan Kendra, extension workers, farmer visits, or even demonstrations and fairs currently play a negligible role in disseminating information on modern technology. For instance, extension workers were a source of information in only 5.7 per cent of the cases (Table 3.9).

Both government and other sources of information were least accessed by the marginal and small farmers. For example, only 2.7 per cent of the smallest category of farmers (<0.4 ha) accessed information through extension workers. Given that the government extension services are needed precisely to overcome market failures, which is more acute in the case of marginal and small farmers, this disparity is of considerable concern. As against 10 per cent of the medium and large farmers, only around 4 per cent of the sub-marginal and marginal farmers and 8 per cent of the small farmers accessed information regarding improved practices and technology from extension workers. Similarly, participation in training programmes, exposure to Krishi Vigyan Kendras, study tours etc. constituted the least source for the smallest groups. Moreover, the quality and reliability of extension services appeared to be a major concern of the cultivators.

Integration into Markets and Risk

3.56 Marginal and small farmers are influenced by market behaviour but usually the prices they receive are usually very low because of their economic vulnerability and weak bargaining capacity. The entire crop of the small holders comes to the market at one time. The small cultivator, who is often heavily

indebted, has poor bargaining strength to get a favourable deal from the more resourceful traders. During high price periods also, more often than not, it is the middleman who benefits. With development of more integrated markets, led by large private players, smaller cultivators face asymmetric conditions and large transaction costs.

3.57 The state support price system is of prime importance in protecting the interest of the farmer. However, the government's attempts to mitigate farmers' risks through measures as the MSP have also not been very successful as the coverage of the scheme in terms of crops and area is small. The small farmer is thus not assured of a minimum return on his labour and investment. As Jodhka (2006) noted, public marketing services have also declined in spread and scope, again increasing the role of private traders. On the input side, the weakened public extension support system has increased the dependence of the farmer on private dealers, often resulting in inappropriate choice of crops and inputs.

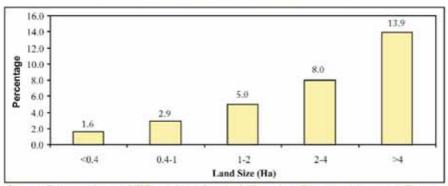
3.58 In several states, the Agricultural Produce Marketing Corporation Acts have either been amended or repealed, providing freer entry to private organised trade. Contract farming is also now being considered as a way of integrating farmers to markets. With such integration, crop diversification is likely to receive a fillip. But this may not automatically translate into higher returns to small farmers due to high transaction costs for the firms and the weak bargaining strength of the farmers, who will remain so unless the small and marginal farmers

⁴ Appendix Tables A17 -19 present state wise share of farmers using Modern Farming Practices

can be federated into groups. As we show below, existing structures (co-operatives, self-help groups) cover a very small proportion of the smaller farmers.

3.59 Being a nature-based activity, cultivation is a highly risky. Further, in the liberalised scenario price risks have also increased (Suri 2006; Jodhka 2006). Heightened dependence on market has exposed the farmers to fluctuating price regimes, more so in the areas of commercial farming. This is of particular concern for the small and marginal farmers who do not have the means to cope with such shocks.

Fig 3.6: Percentage of Farmer Households reporting Crops Insured at Anytime, 2002-2003



Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003.

In case of crop failures, insurance is important. However, crop insurance has made little headway except where it is built into other transactions such as cooperative credit. Insurance is an uncommon practice with only 4 per cent farmers having ever insured their crop. Nearly 57 per cent of the farmers who had never insured their crops are unaware of the crop insurance schemes. Inability to pay the premium was reported as a reason by only 3 per cent. Marginal and small farmers are much less likely to have crop insurance. Compared to 14 per cent of the large farmers, only around 2 per cent of the sub-marginal farmers, 2 per cent of the marginal farmers and 5 per cent of the small farmers had crop insurance (Fig 3.6). The figure was even smaller for SC/ST farmers. Even among farmers with insured crops, follow up and payment by insurance companies in case of crop failure is still a weak area (Based on Situation Assessment Survey of Farmers 2003).

Membership of Groups

3.61 Collective organisation for farmers may be said to be a sine qua nom for demanding and securing public services and assistance especially in the context of economic reforms that are by and urban areas and residents. Farmers' groups and co-operatives help the farmers overcome diseconomies of small size and access credit, inputs and markets. Cooperative forms of organisation has a long history in rural India especially among farmers. While there has been several problems facing the cooperatives, it has stood the test of times but seem to be

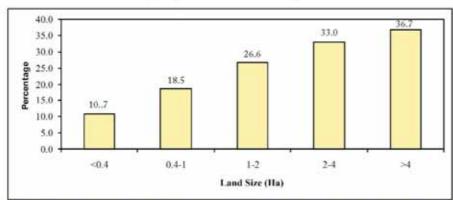
facing increasing threats from a variety of fronts.

3.62 Only about 30 per cent of the farmer households are members of cooperative societies (Appendix Table A20). Among the sub-marginal farmer households only 18 per cent are members of the cooperatives, while 26 per cent of all marginal and small farmer households are members of cooperatives. At the other end, among the large farmer households, with land size above 4

hectares nearly 50 per cent are members of cooperative societies. About 10 per cent of them, though were members of the co-operatives, but did not make use of the services. Thus, only 20 per cent of the farmer households availed the cooperatives' services, and 9 per cent of them availed credit and seed procurement services. Compared to the 37 per cent large farmers, only 11 per cent sub-marginal farmers and 19 per cent marginal farmers availed services of the co-operatives (Fig 3.7). As stated elsewhere, there are sharp regional variations. This challenge is also one of social inclusion as seen here because the lowest incidence of membership is among STs and SCs, especially among SC and ST marginal and small farmers.

3.63 What about other membership in other types of collective organisations? These forms of organisations such as any Registered Farmers Organisation or a Self Help Group show that they are yet to make any dent

Fig 3.7: Percentage of Farmer Households Availing any Services from Cooperatives



Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of insufficient levels of income from Farmers 2003.

among the farmers as a whole, let alone marginal and small farmers. At all India level, only 2 per cent of the farmer households were associated with organizations while 5 per cent of them had at least one as a member of the Self-Help Groups (SHGs) (Table 3.10). Across land sizes, percentage of farmer households with membership of registered farmers' agencies increase from 1.7 among sub-marginal and marginal farmers to 3.7 among medium-large farmers. The share of farmer households with membership of SHGs was higher than for any registered farmers' association. It ranged from 4.4 per cent among sub-marginal and marginal farmer households to 5.4 per cent among medium-large households. It was slightly higher among the small farmer households, 5.7 per cent (Appendix Table A21).

3.64 Membership of farmers' organizations and SHGs is higher in the southern states of Kerala, Tamil Nadu, Karnataka and Andhra Pradesh (Appendix Table A22). Thus, presently, economic organisation of farmers, particularly the marginal and small farmers, which could have helped them overcome the size constraint, is extremely insignificant.

Significance of Non-farm Income

3.65 The contribution of off-farm income to total income of farmers is usually inversely related to farm size. In case of small farmers, the insufficient levels of income from farm alone and higher man-land

ratio forces them to look for avenues of income other than agriculture. The smallest category of farm households rely mainly on wage incomes to supplement incomes from cultivation. Among marginal farmer households, as per the Farmer's Survey, 54 per cent income is from wage income and only 26 per cent is from cultivation (Fig. 3.8). The share of income from animal farming (5.5 per cent) is also highest for this category of farmers. Among small farmers, 56 per cent of the income is from cultivation while 30 per cent is from wages.

3.66 In general, the share of wages, animal farming and non-farm business in the total income of the farmer household goes down with the increase in farm size while share of cultivation increases with the farm size. In other words, wage income and animal farming are currently the major ingredients of household income in marginal and small farm size groups and they have little access to proper non-farm jobs. In order to improve their lot, the capacity of the weaker sections of farmers to move into more

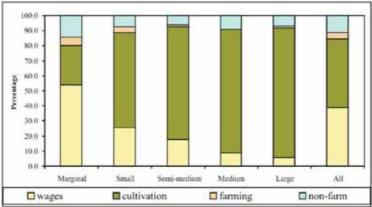
Table 3.10: Percentage of Farmer Households Reporting Organisational Linkage

Organisation	<0.4hec	0.4-1hec	1-2hec	2-4hec	>4hec
Availing of any service from Co-operatives Member of a Registered Farmers	10.7	18.5	26.6	33.0	36.7
Organisation	196	1.7	2.7	3.7	2.2
Member of a SHG	123	4.4	5.7	5.4	4.8

Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003

Across the states negligible share of farmer households have membership in registered farmers' associations among the land size classes (Appendix Table A21). The only exceptions in this regard are the states of Kerala in all land size classes, Gujarat, Tamil Nadu and Karnataka among medium-large farmer households and Assam among sub-marginal and marginal farmers. Similar to the national pattern, the share of farmer household members in SHGs is higher among the small farmers than among the medium-large farmers in most states. Medium-large farmer households from the continuous belt from eastern India, Bihar, Jharkhand, Chhattisgarh, Madhya Pradesh, Rajasthan up to Gujarat and Punjab in the West have higher share of membership in SHGs. In the southern states the small farmers are more likely to be members of SHGs. Bihar, Jammu & Kashmir and Rajasthan have negligible share of farmer households with membership of SHG.

Fig 3.8: Contribution of Different Sources in Household Income of Farmers across Farm



Source: Computed using NSS unit level data 59th Round on Situation

remunerative non-farm income-generation activities has to be built up through provision of skills, credit etc.

Conclusion

Indian agriculture sustains a large cultivating population on the meagre land resource. Land ownership distribution remains highly skewed and the average size of landholding has been steadily declining. An overwhelming majority of farmers are marginal and small cultivators. These farmers use available inputs intensively and, except in some regions, show higher efficiency. In general, small farms are not less efficient than large farms. Given right conditions, after the initial 'transitory' period, the small farmers catch up and even surpass the large farmers in use of improved technologies, provided they are backed up by improved access to inputs and credit. However, due to a low resource base and inadequate income from alternative sources, they are caught in a vicious circle of poverty and have to be supported in their relentless struggle to attain their full potential and to have a better future.

Poverty of Small Farm-Households/Small Quantities of Land and Capital → Low Capacity to Invest in Farming → Smaller Total Production → Weak Bargaining Power → Poor Access to Public Institutions → No or Inadequate Access to Inputs, Markets, Credit, Support Prices (Provisions of Policy) due to failure of proper formulation and execution of policy → Low Incomes à Poverty.

3.68 The agricultural sector as a whole showed poor performance in the last decade. Agricultural growth rate had declined during 1997-2004 and food grains production virtually stagnated. Rising costs of cultivation, low remunerations, high risks with frequent crop failures, declining agricultural growth, and mounting debts have all led the farmer to a distress like situation. Signs of agrarian distress were clearly visible in several areas. The spate of farmers' suicides in many areas is the most disconcerting manifestation of this distress. Marginal and small farmers have borne the brunt of the adverse circumstances in agriculture.

3.69 Not surprisingly, nearly 40 per cent of the farmer households say that they disliked their occupation (Appendix Table A23). The disinclination to farming is higher among smaller farmers. While nearly 44 per cent of the sub-marginal and marginal farmers reported they disliked farming, only 28 per cent of the medium and large farmers said so. The main reasons for this disinclination were the lack of viability of farming, followed by its perceived risks.

3.70 While there have been efforts such as those to promote institutional credit to rural areas, improved access to inputs, subsidies on fertilisers and electricity, minimum support price etc. these have not been fully successful in protecting the interest of the farmers in general, and marginal/small farmers in particular. The analysis of results from the Farmers' Survey clearly establishes that these farmers have inadequate access to information, to agencies promoting technological change, to co-operative networks and related organisations and are less able to benefit from the plethora of governmental interventions. This is significant since; in any case, these farmers are less well placed to take advantage of the markets.

3.71 This gap is now widely recognised. The 11th Plan itself has stated that: "Small and marginal farmers often lack access to major agricultural services, such as credit, extension, insurance and markets. This is especially true of women farmers since there is pervasive male bias in provision of such services."

⁶ Across the states it was mainly the sub-marginal and marginal farmers who reported that they disliked their occupation (Appendix Table A23), the highest being in the eastern states of Bihar, Jharkhand, Orissa Chhattisgarh and Uttaranchal. Lowest share of the medium-large farmers who reported that they disliked farming were from Uttaranchal, Andhra Pradesh and Gujarat.

3.72 A focused initiative is clearly required to facilitate the growth of small farm agriculture. It is imperative that the government takes initiatives to expand the network of institutional credit facilities in the rural areas and that the credit needs of the small and marginal farmers are met through earmarking credit for the group. Extension and marketing initiatives need to focus on this segment. At the same time, group initiatives need to be encouraged and awareness among the group has to be increased. The procedural formalities also have to be made less stringent to make the system more user-friendly for the largely illiterate group. Further it is of prime importance that the educational levels and skill development among the farmers are enhanced so that there is increased occupational diversification among

them. Improved education levels among them will increase their awareness levels and may also lead to greater cooperation among them. This will make them better organized for collective action and better equipped to anticipate the market trends. This also will increase their exposure to the new techniques of production and other initiatives taken by the government to protect their interest. In view of the poor conditions of the farmers the National Policy for Farmers, 2007, emphasizes the need to improve their well-being rather than concentrating solely on enhancing the production. It needs to be reiterated that the gains of several initiatives in this context have not been reaching the majority of small and marginal farmers. This issue needs to be appropriately addressed.

4

Focus on Marginal and Small Farmers: A Case of Relative Neglect?

4.1 Indian agriculture has long been regarded as a predominantly small holder economy, although as we have demonstrated this is in the background of a great deal of differentiation among the farmers as well as significant changes over the years. It is, however, significant that, except for brief policy incursions, there has been lack of adequate attention to the specific problems of the smallest category of landholders, and to the solutions required to ensure their progress.

Earlier Strategies for the Development of Marginal/Small Farmers

4.2 While the strengths and weaknesses of small holding agriculture were part of policy discussions from the very beginning, the issue acquired fresh urgency after the induction of the green revolution strategy which initially led to an increasing gap between large and small farms in the adoption of new technologies. This was increasingly recognised in independent analyses as well as government reports and necessitated an urgent policy response. This took place in a number of important ways in the latter half of the 1960s, including measures such as the nationalisation of banks, the expansion of rural cooperatives and other institutions and the launch of targeted programmes for marginal farmers & agricultural labourers, and small farmers.

- 4.3 The Rural Credit Review Committee, (RBI 1969) felt that some new strategy and special institutions were immediately required to deal with the inherent inability of the small and marginal farmers in managing credit, etc., on their own strength, and to enable them to participate equally in the process of development, It suggested that development agencies might be formed to cater to the needs of only small/marginal farmers, landless labourers, and rural artisans exclusively.
- 4.4 During the Fourth Plan (1969-74), the Small Farmers Development Agencies (SFDA) and Marginal Farmers and Agricultural Labourers Development Agencies (MFALDA) were instituted, and began operation in 1971 with the objective of assisting marginal and small farmers raise their income level. This was to be achieved by helping them, on one hand, to adopt improved agricultural technology and acquiring means of increasing agricultural production like minor irrigation sources, and on the other hand, to diversify their farm economy through subsidiary activities like animal husbandry, dairying, horticulture etc.
- 4.5 The Small Farmers Development Agency and Marginal Farmers and Agricultural Labourers Development Agencies were set up as corporate and autonomous bodies and were registered under the Societies Registration Act,

1860. These agencies were to work at District level. Each agency consisted of the governing body with few members of executive staff. The District Collector was the Chairman of SFDA / MFALDS assisted by district officers of the various development departments. The Agencies were to function as a catalyst to development and use the regular department staff for execution of schemes. There were one project Officer assisted by two to three Assistant Project Officers as staff of the agency. These were drawn from the departments whose projects were taken up by the agency for implementation. There were some representatives of the small/marginal farmers as non official members also. The functioning of the SFDA / MFALDA was reviewed by a State Level Coordination and a Review Committee was to keep a constant watch over the progress of the implementation of the schemes. The Committee was also to ensure the coordination between various departments like animal husbandry, agriculture, marketing, milk societies, horticulture etc (Pandey and Sodhi, 1981).

- The target group of the SFDA were small farmers was who owned up to 5 acres of dry land or up 2.5 acres of irrigated land while that of the MFALDA were marginal farmers were those having up to 2.5 acres of dry land or up to 1.25 acres of irrigated land and agricultural labourers who earned more than 50 per cent of their wages from agricultural work. The identified small farmers are allowed subsidies up 25 per cent and marginal farmers and agricultural labourers were allowed subsidies up to 33.3 per cent of the investment cost for various programmes such as irrigation, land development, soil conservation, animal husbandry, etc. The outlay for each of the SFDA and MFALDA projects for the period of five years was Rs. 1.5 crore respectively or 30 lakh each year. Up to March 1980, 8 million persons were assisted under SFDA and MFALDA. Out of this 1.3 million were under the category of SC / ST. 6.1 million or 75 per cent of these beneficiaries have been helped in acquiring access to improved agricultural practices through subsidised supply of inputs, improved implements and field demonstrations.
- 4.7 The National Commission on Agriculture (1973), while highlighting the special problems of marginal and small farmers, suggested that an area approach should be followed to draw up programmes

- and infrastructure for their development. It also recommended a merger of the two separate agencies. Accordingly, these two agencies were merged in 1974 to form SFMFALDA (Planning Commission 1979).
- 4.8 According to the Programme Evaluation Organisation of the Planning Commission, as well as other smaller studies, the programmes were successful in attracting a number of small farmers to the cooperative fold and increasing incomes wherever tangible irrigation and other assets could be provided. Their main shortcomings, however, arose from the fact that they had no dedicated field staff and had to rely entirely on the existing block staff and the staff of other departments; their financial and other outreach was very limited; there were operational difficulties in identifying eligible households because of the complex definition of "agricultural labourers", and the agencies were burdened with a multiplicity of tasks.
- 4.9 During 1978-80, the SFMFALDA worked concurrently with the newly launched Integrated Rural Development Programme (IRDP), but was subsumed under this programme from October 1980.
- 4.10 It would be recalled that this period also saw the growth of co-operative and banking institutions which facilitated the adoption of new technologies by the small holders, closing the gap between them and the large farmers. Such a focus on the weaker sections within the agricultural sector was able to raise the productivity and incomes of these farmers.
- 4.11 However, since the early 1980s the policy framework with respect to agriculture has changed and, apart from a few, programmes giving directed support to the marginal and small farmers have been largely withdrawn. Among the programmes which were directed at marginal and small farmers, the Million Wells Scheme (MWS) deserves a mention. The scheme, introduced in 1988-89 with the prime objective of catering to the open irrigation wells free of cost needs of the small and marginal farmers but who are below the poverty line and freed bonded labourers to increase the productivity of these holdings. Although the scheme faced various impediments, it has contributed to increasing the irrigation potential on small/marginal farms. There were also the two area based programmes, namely the Drought

Prone Area Programme (DPAP) and the Desert Development Programme (DDP) were started with a view to encouraging sustainable resource management and agricultural development in specific agro-ecological settings. Since the Eighth Plan, a major emphasis has also been on participatory watershed development on a basin approach and a comprehensive Watershed Development Programme (WDP) was started in the Eighth Plan (1992-97).

Recent Initiatives

The post-nineties period saw a decline in government support in the form of declining investment in agriculture, lower emphasis on research and extension, and low overall levels of expenditure. The withdrawal of the State has led to a much greater dependence on private sources for inputs, extension, markets and credit. Farmer suicides have been widespread in the last several years and the victims have largely been marginal and small farmers. Increasing costs of cultivation leading to higher indebtedness, crop failures and incapacity to face price shocks with greater liberalization of the agricultural sector has driven farmers to the extreme. This has prompted the Central and state governments to set up several Commissions including the National Commission on Farmers and the Committee on Agricultural Indebtedness to suggest remedial steps.

The Government constituted the National Commission on Farmers (NCF) under the chairmanship of Dr. M.S. Swaminathan to specifically look into all aspects concerning the protection of interest of farmers. The key recommendations of the NCF are summarised in its proposed National Policy for Farmers. The policy document recognizes the misery of the poor farmers and observes "agriculture has become a relatively unrewarding profession due to generally unfavourable price regime and low value addition, causing abandoning of farming and increasing migration from rural areas....". According to the NCF, several factors contribute to this situation. These include shift in cropping pattern towards cash crops, lack of level playing field for farmers in the global market, increased dependence on high-cost inputs which is increasing costs of cultivation and indebtedness, increasing risks, declining profitability and declining public support. In this context, the NCF has noted that the Government had initiated a number of measures such as Bharat Nirman, NREGA, expansion of credit at lower rates of interest, promotion of horticulture, fisheries, changes in the Agriculture Produce Marketing Committee Act (APMC) etc. But most of these measures are still in the initial stages. The NCF has also recognised the need for a social security system and has endorsed the recommendations of the NCEUS in this regard.

4.14 The NCF recommendations cover a variety of issues. Some of the key recommendations are:

- Setting up sophisticate soil testing facilities and issue of soil health passbook to every farmer.
- Setting up the Rainfed Area Authority and convergent measures for water conservation.
- Developing a cadre of rural farm science managers at the panchayat level and strengthening lab to land interactions.
- Develop computerised farm advisory services through the Every Village a Knowledge Centre Movement.
- Promotion of commodity based farmers' organisations to combine the advantages of decentralised production with economies of scale in post-harvest management, marketing etc.
- 4.15 The Eleventh Plan Steering Group on Agriculture (Planning Commission 2007) and the Planning Commission's note to the National Development Council have also amply recognised the adverse conditions faced by agriculture and have advocated detailed strategies to reverse the downturn. Since the recommendations of the Steering Group have been incorporated, in the main, in the Eleventh Plan, and the Plan proposals are discussed below.
- 4.16 The access to credit by farmers as well as the mounting debt has been a major source of concern. The share of agricultural credit in the Net Bank Credit (NBC) declined from 17 per cent in 1994 to 9 per cent in 2004. The Government is currently seized with the issue of extending affordable credit to the agricultural sector. Banks have been asked to increase credit by 25 per cent each year, and the rate of interest has been pegged at 7 per cent. The announcement of Government Policy in 2004 requiring the doubling of agricultural credit in three

years, has undoubtedly led to an increase in the volume of credit, but as a percentage of NBC it still stands at a low 11.9 per cent in 2006. As far as marginal and small farmers are concerned, the RBI does not maintain a separate record of their credit off-take but surveys such as the Farmers Survey as well as recent analyses of secondary data bring out a dismal picture.

The Government has already initiated a number of measures to alleviate the distress faced by the farmers. With respect to 31 districts, in the four states of Andhra Pradesh, Maharashtra, Karnataka and Kerala, where the incidence of farmers' suicides has been very high, the Government has decided to launch a special rehabilitation package to mitigate the distress of farmers. The package will be implemented over a period of 3 years and includes both immediate and medium term measures. The rehabilitation package aims at establishing a sustainable and viable farming and livelihood support system, crop centric approach to agriculture, assured irrigation facilities, watershed management, better extension and farming support services, improved marketing facilities and subsidiary income opportunities through horticulture, livestock, dairying, fisheries etc. A special package has also been announced for the districts in Vidarbha, which face an agrarian distress. On the credit front, this package consisted of a debt relief package to restructure/reschedule overdue loans, so that the farmers become eligible for fresh loans; waiver of overdue interest on agricultural loans amounting to about Rs. 7 billion, and steps to increase the flow of institutional credit to farmers in these districts. The package is being implemented through a State Level Committee for coordination and supervision, including representatives of the Government of India and the state government, district level committees and PRIs.

4.18 A committee under Prof. R. Radhakrishna was asked to examine all aspects related to agricultural indebtedness in the areas of high agrarian distress and has made several important recommendations. Further the NCEUS has also examined the credit and debt situation with special reference to marginal and small farmers and has made specific recommendations to increase the flow of credit to these farmers and to alleviate their debt situation. Recently, the government has announced a Rs. 71,680 crores package for waiving the

debt on approximately 36.7 million marginal and small farmers with 31.12,2007 as the cut-off date. It has also taken a decision to give a one time settlement relief to other categories of farmers (numbering about 5.97 million). Farm loans disbursed before 31 March 2007, that have been put on the overdue list after 31 December, and remain unpaid till 29 February 2008, would be entitled for both the loan waiver and one-time-settlement schemes.

Strategy during the Eleventh Plan

4.19 The Eleventh Plan has targeted a 4 per cent rate of growth of agriculture. It recognises that even this ambitious rate of growth will not be able to reduce the gap between agricultural and non-non-agricultural workers unless the pressure of the workforce on agriculture reduces. The plan document also recognises that there could be both demand and supply side factors constraining the growth of agriculture. Among the main factors constraining the growth of agriculture on the supply side, the Plan emphasises the role of technology and public investment, given that both of these had slackened during the preceding decade. The Plan also highlights the imbalance between irrigated and rain-fed areas.

The 11 Plan recognises that emphasis needs to 4.20 be placed on marginal and small farmers and spells out a number of areas, including land reform which could address the constraints faced by these farmers. The Plan also acknowledges the growing feminisation of agriculture. While building up on the programmes launched during the 11th Plan, the recent strategy for agricultural development is underpinned by four major programmes/schemes: Watershed Development which aims mainly at water stressed rain-fed areas; the Accelerated Irrigation Benefit Programme, the National Agricultural Development Programme, and the National Food Security Mission (GOI 2007d) The total outlay for these programmes in the Eleventh Plan is Rs. 25,000 crores and Rs 4882 crores respectively.

4.21 The National Agricultural Development Programme (NADP) or the Rashtriya Krishi Vikas Yojana (RKVY) has emerged from the deliberations of the National Development Council which has called for a new Additional Central Assistance Scheme to the State Plans, over and above the existing schemes to enable them to draw up comprehensive plans, suited to local needs, to develop agriculture more comprehensively. The eligibility for the scheme would depend upon the amount provided for agriculture in the State Plan Budgets over and above the base line percentage of expenditure incurred by the states on agriculture and allied sectors. The RKVY assistance would be in the form of a 100 per cent grant. The states are required to prepare the agriculture plans for the districts and the state to comprehensively cover resources and indicate specific action plans. Convergence with other schemes of the GOI is proposed under the RKVY.

- 4.22 The RKVY will be available to the states in two streams. Stream 1 would consist of specific projects. Stream II would be available for strengthening existing state schemes and for filling gaps. These ratios would be reviewed after one year. The requirements for the RKVY would be assessed on the basis of the District Agricultural Plan (DAP) and the State Agriculture Plans (SAP). These plans would cover the agriculture and allied sectors comprising animal husbandry and fishery, minor irrigation projects, rural development works, agriculture marketing schemes and schemes for water harvesting and conservation etc. keeping in view the natural and technological possibilities in each district.
- 4.23 The indicative areas of focus under the programme include the following;
 - a) Assistance for making available certified/ HVY seeds to farmers; production of breeder seeds; purchase of breeder seeds from institutions such as the ICAR; public sector seed corporations; production of foundation seed; seed treatment; Farmer field schools at demonstration sites; training of farmers etc. for the integrated development of major food crops as well as any other crop/ variety that may be of importance to the
 - Activities related to enhancement of soil health; integrated pest management schemes;
 - Development of rainfed farming systems in and outside watershed areas, as also

- Integrated development of watershed areas, wastelands, river valleys: Assistance development of land as also assistance for horticulture, generating livelihoods for BPL farmers.
- d) Encouraging non-farm activities;
- Strengthening of market infrastructure and marketing development (including assistance for formation of farmer' SHGs, setting up collection centre;
- f) Strengthening of infrastructure to promote extension services. This would include new initiatives for training and skill development and to revamp existing State agricultural extension systems.
- g) Special schemes for beneficiaries of land reforms.
- 4.24 The National Food Security Mission has been launched as a Centrally Sponsored Scheme with the objective of increasing production and productivity of wheat, rice and pulses on a sustainable basis so as to ensure food security of the country. The production of rice, wheat and pulses is targeted to increase by 10, 8 and 2 MT respectively by the end of the 11th Plan. The approach is to bridge the yield gap in respect of these crops through dissemination of improved technologies and farm management practices. The Scheme will focus on districts which have high potential but relatively low level of productivity performance at present.
- 4.25 The mission aims at achieving its objectives through promotion and extension of improved technologies i.e. seed, integrated nutrient management including micronutrients, soil amendments, IPM and resource conservation technologies along with capacity building of farmers. The scheme will be implemented through the Agricultural Technology Management Agency (ATMA) at the district level.
- 4.26 The selection of beneficiaries and the identification of priority areas will be done by the PRIs. At east 33 per cent of the beneficiaries would be small/marginal farmers. The allocation of SC/ST farmers would be in proportion to their population in the district. A beneficiary farmer would be entitlement to avail of assistance limited to 2 ha. The mission interventions would

include demonstration of improved package of practices; promotion of hybrid seed production; varietal replacement of rice and wheat; development, production and distribution of breeder seeds of pulses; production and distribution of foundation seeds of pulses; training of framers etc. . Individual beneficiaries identified by the PRIs would be distributed seeds and seed minikits containing 5 kg of seed free of cost; distribution subsidy not exceeding Rs. 1200 per quintal or 50 per cent of cost on subsidised seeds of pulses; nutrient management on area not exceeding 2 ha; assistance of Rs. 500 per ha or 50 per cent of cost to farmers whose soil is deficient; assistance for nutrient management impulses; subsidy for purchase of specific farm implements; plant protection. Assistance will also be provided to groups of framers for community generators for irrigation.

4.27 The Macro Management of Agriculture Scheme, a centrally-sponsored scheme which became operational in 2000-01 after the merger of 27 schemes, has been revamped in the light of the other initiatives taken in this plan. The scheme provides sufficient flexibility to the states to develop and pursue the programmes on the basis of their regional priorities. After the creation of the National Horticulture Mission (NHM) in 2005-06, 17 erstwhile schemes remained with the MMA. Ninety per cent of the cost of the scheme is borne by the Centre. During the 10" Plan, the scheme incurred an expenditure of Rs. 4,154 crore, achieving, interalia, treatment of 24.13 lakh hectares of degraded land on watershed basis, 10.39 lakh hectares of land in river valleys and flood prone rivers, 7.36 lakh hectares of alkali soil and distribution of 17.14 lakh farm equipment.

4.28 Revised guidelines for the scheme have been issued in July 2008, with respect to coverage and other issues in order to avoid overlap with other new schemes/ programmes launched by the Government of India and to bring uniformity in the cost and subsidy structure of the MMA with other schemes. The inter-state allocation under the scheme will now give a 50 per cent weightage to GCA and 50 per cent to percentage of area under

marginal and small farms. Thirty-three per cent of the expenditure under the scheme will be on marginal-small and women farmers, with the share of expenditure allocated to SC/ST farmers in proportion to their population. The list of sub-schemes under the MMA have now been pruned to 11, and 15 components have been identified for financial assistance. These include distribution of hybrid/HYV seeds; distribution of seed minikits and micro-nutrients; demonstration of improved packages; promotion of agricultural mechanization; training of farmers; skill development, etc.

down an overarching blueprint for the growth of the entire farming sector. The basic objectives of the policy are to improve the livelihood, income and social security of the farmers, giving due weightage to the human and gender dimensions. The Policy gives key place to asset reforms including land, water, livestock, fisheries, and bio-resources and animal genetic resources. It looks at ways of strengthening the range of support services, in farmer-centric and gender sensitive ways. The Policy also suggests participation in group approaches such as cooperatives, SHGs, small holder estates, farmer companies, and contract farming as the future of Indian farming.

It will be noted that these programmes and policies cover the entire agricultural sector and do not focus on marginal and small farmers alone. With the marginal and small farmers constituting the majority of farmers in the country as well as accounting for a substantial proportion of operated area, and with mounting evidence of an agrarian crisis, especially affecting marginal and small farmers, there is a special requirement to focus on these farmers. In its earlier report, this Commission has already recommended a package of measures focused specifically on marginal and small farmers which include (a) acceleration of land and water management programmes; (b) a special programme for marginal and small farmers; (c) measures to increase the flow of credit to these farmers; and lastly, (d) measures addressed at areas specially affected by acute agrarian distress.

5

The Commission's Approach in the Report on Conditions of Work and Promotion of Livelihoods

5.1 In the Commission's view, marginal and small farms are the backbone of Indian agriculture as they constitute about 84 per cent of all farmer households, own 43 per cent of land and operate about 46 per cent of area, producing half the output. In its Report on Conditions of Work and Promotion of Livelihoods the Commission has recommended that focused attention should be given to the issues confronting the marginal and small farmers so that they may be able to achieve higher incomes from agriculture, with lower risks. The report suggested a number of measures including education and skill development, changes in macro-policy, land reforms to improve the condition of farmers, especially marginal and small farmers. Since, due to their small size, marginal and small farmers suffer more from the prevailing market failures in agriculture in matters relating to credit, input supplies and marketing of output, access to new technologies etc., the Commission recommended the following package of measures for this segment of farmers:

(I) Special Programme for Marginal and Small Farmers

5.2 Based on its analysis of the role and the problems facing marginal and small farmers, the Commission recommended that during the Eleventh Plan period, the government should revive a targeted programme focusing on small and marginal farmers, with an initial thrust on areas where the existing yield gap is considered to be high. For this purpose it proposed that a special agency or coordinating mechanism may be set up if required. The objective of the Government's intervention would be to promote state and area specific interventions which could improve the condition of marginal and small farmers. The Government could take as its priority tasks the development of area specific irrigation schemes; crop procurement, measures for reduction of risk; formation of producer groups among such farmers (e.g., SHG or cooperative approaches) with respect to sharing of irrigation resources, inputs and marketing arrangements; tenancy reform and group farming; strengthening of extension services and development of technological platforms which could be accessed by such farmers etc. A mechanism should be set up under the programme to oversee the arrangements in the districts for purchase of inputs and marketing of output, the area where market failures severely affect small and marginal farmers.

The scope of this programme has been elaborated by the Commission in the present note.

(II) Emphasis on Accelerated Land and Water Management

- 5.3 The Commission has taken the view that land and water management is the key to equitable and sustained growth in rural livelihoods. The problems of land and water management as well as solutions to these problems vary from region to region. But these problems affect marginal and small farmers more than bigger farmers. The Commission consequently recommended that the programmes of land and water management must be significantly upscaled.
- 5.4 Further, in the rainfed areas, the watershed development programmes are of crucial significance and have a high benefit cost ratio. About 45 million hectares have been covered in some way under watershed programmes till date, while about 75 million hectares remain to be covered. Therefore, the Commission recommended the accelerated expansion of the watershed development programmes and Rainfed Area Programmes in the country to revive agriculture in the rainfed agricultural land, on which a large number of the rural poor are dependent, as an immediate priority. The Commission also recommended that watershed development should be converged with other programmes and the convergence should be ensured in activity mapping and in the district plans with specific focus on benefits to the small and marginal farmers.

(III) Credit for Marginal-Small Farmers

- 5.5 Since the position of credit to agriculture, and more so, with respect to marginal and small farmers was reviewed by the Commission and found to be extremely unsatisfactory, in addition to the steps already taken by Government and the banking system, the Commission recommended that the following measures need to be initiated:
- 5.6 First, the priority sector guidelines need to be revised and a target of 10 per cent needs to be fixed for marginal and small farmers. At present, the revised priority sector lending guidelines announced by the RBI on 30th April, 2007 fix a quota of 18 per cent for agriculture, 10 per cent for weaker sections, including marginal and small

- farmers, and 12 per cent for other designated purposes. However, the agricultural quota includes direct agricultural loans to corporate entities up to Rs. 10 million and for even higher amounts for indirect agricultural activities. The limit of loan for activities eligible for direct agriculture has been raised to Rs. 2 million. The Commission recommended that the priority sector guidelines of the RBI be amended and a 10 per cent quota, out of the 18 per cent presently assigned for agriculture, be fixed for farmers with land holdings below 2 hectares. The weaker section quota for small and marginal farmers may then be released for other socioeconomically weaker segments.
- 5.7 Second, the Reserve Bank should separately monitor the credit flow to this segment of farmers i.e. marginal and small farmers.
- 5.8 Third, the Commission, in its detailed report on credit has recommended measures to increase the outreach of the banking sector in rural areas and in areas of financial exclusion. These recommendations should be considered and implemented by government on an urgent basis.
- 5.9 Fourth, 20 - 40 per cent of marginal and small farmers are excluded from the formal financial sector due to lack of patta and title deeds. The majority of these farmers are informal tenants. The RBI has issued guidelines, following the Swarnakar Committee recommendations that such farmers be extended credit on the basis of certificates issued by the panchayats. These guidelines should be complied with by the banks and the procedures simplified to the extent necessary. However, in order to reduce the perceived risk of default of this excluded segment, as well as the larger segment of marginal and small farmers, due to which the banks do not approach these farmers actively, the Commission is of the view that the Government may set up a Credit Guarantee Fund in NABARD, on the lines of the CGF set up by the Ministry of Micro, Small and Medium Enterprises (MSME) which provides guarantee cover on loans to small units.

(IV) Farmers' Debt Relief Commission

5.10 The Commission analysed the overall condition of farmers as well as the acute distress faced by them in some parts of the country and concluded that the impact of the agrarian distress has been felt most by marginal and small farmers. The access of these farmers to institutional credit being limited, they are compelled to take recourse to non-institutional sources of credit. Failure to repay these loans on time is one of the several causes of the crisis leading to tremendous vulnerability of this group of farmers.

5.11 The Commission is of the view that the Central Government could provide guidelines and assistance to states experiencing agrarian distress, both natural and market related, for setting up Farmers Debt Relief Commissions. It recommended that the Government, as part of the relief package, could extend assistance to the State Commissions on a 75:25 basis. The Debt Relief Commissions, as part of their award, should examine and institute measures which ensure the entitlement of the marginal/small farmers to institutional credit. These measures would complement the measures already announced by the Government.

Group approaches towards Strengthening Marginal and Small Farmers

- 6.1 The Commission had earlier advocated that a strategy for marginal and small farmers must focus on group approaches so that these farmers can benefit from economies of scale. It has suggested that a focused approach of the programme may be used to incentivise the formation of farmers' groups and apex organisations, and facilitate in finding solutions to problems of irrigation, inputs, markets, procurement and risk.
- 6.2 As shown in this report, marginal and small farmers encounter a number of problems, and these vary in intensity from region to region. These problems may be grouped into two broad categories viz. the 'first order' problems posed by their inherent small size and poor resource endowments, and the 'second order' problems related to the reach of public programmers and the delivery system. The first order problems relate to the small, dispersed and scattered nature of marginal-small farmers which result in high costs in purchase of inputs and low price of produce due to imperfect and often interlocked markets and high transaction costs; rationing in credit markets; lack of information on the improvement in agricultural technology and difficulties in accessing knowledge of appropriate and timely agronomic practices; and inability to undertake improvements like land and water

resource development because of the lumpiness (indivisibility) in of investment.. These problems are widely recognised. Most of the state interventions are apparently designed to help farmers in general and marginal-small farmers in particular, to overcome these problems. Here come the 'second order' problems which are due to the failure of delivery of state support services to the marginal-small farmers as amply demonstrated in this Report. The failure of the state support services to reach the marginal and small farmers partly result from the same type of problems that they face in dealing with markets i.e. information asymmetry and transaction costs. They are further reinforced by the lack of 'voice' of these farmers and the agrarian structure in which rich farmers still constitute the rural oligarchy and the bureaucratic nature of the delivery agencies so that the benefits of extension, subsidies, institutional credit and access to regulated markets often by-pass this segment.

6.3 The experience in India as well as in other countries has shown that marginal-small farmers can overcome these problems if, and only if, they have their own group or collective organisation, formal or informal. Marginal-small farmer groups or collectives help in overcoming the 'first order' problems of small-size and isolation by mobilising them for collective self-

help actions aimed at improving their own economic and social situations. These groups or collectives serve as effective institutional devices in surmounting the 'second order' problems in delivering extension, credit and other agricultural and development services to marginal-small farmers. These institutions lower the delivery costs of these services reduce the expenses in gaining access to these same services, to markets, to group-based participatory extension, and for promoting small-farmer self-development.

- 6.4 The Commission recognises that the question of the type of the primary groups, the level and the form in which they could be federated; and how this entire process could be facilitated is a complex one. In our view there could be a variety of group approaches that could bring benefit to the marginal and small farmers. The group approach is now commonly recommended and sought to be operationalised in a routine manner in a number of places. As mentioned earlier, the NPF also suggests that farmers' groups as cooperatives, SHGs, small holder estates, farmers' companies, contract farming and state farms be encouraged so that the 'farmers of the future' are encapsulated in such institutional forms. The 11" Plan has also strongly advocated group approach, and a number of programmes of the government, including those of the Ministry of Agriculture support group formation for farming, extension support, marketing, processing of produce etc. However, there is still lack of a clear approach on fostering such groups so that they can become an important institutional form in the near future for marginal and small farmers.
- is on group approaches which allow farmers to improve their bargaining power and access economies of scale directly, to some point in the value chain. There are other ways (such as contract farming), through which large buyers (who may also provide inputs or technology) can integrate with farmers, thus incorporating them in their value chain. But since these approaches may not improve the marginal and small farmers' bargaining power or allow them to access scale economies directly, we have not considered them in this report. In sequencing of institutional development, approaches such as 'contract farming' may be beneficial if the 'farmers' groups' are well established and achieve better bargaining power.

- 6.6 Further, when we consider organisation of farmers, 'farmers' associations' of the traditional type come to mind. But these associations have been invariably advocacy groups, largely located at state or national level, without any links to grass-roots farmers' operational and livelihood problems. These hardly address the questions of improvement of marginal-small farmers' economic and social situation, and hence these traditional farmers' organisations are also not discussed here.
- 6.7 In terms of organisation of marginal-small farmers into groups or collectives, the Commission has considered four important models across the country. These are: Cooperatives, Producer Companies, Farmers' Groups such as those in Andhra Pradesh, and SEWA Farmers' Model.

a) Cooperatives

- 6.8 The role of cooperatives in the agricultural sector is well recognised all over the world. In Europe agricultural cooperatives account for 42.6 per cent (1993) of all cooperatives and taken together their market share of farm inputs was 55 per cent and that of outputs 60 per cent. In Japan, agricultural marketing cooperatives handle 95 per cent of rice and in the US fourteen agricultural cooperatives are in Fortune 500 list. In China, about 700,000 (non-governmental) cooperatives assure supply and marketing for 83 per cent of all rural households.
- 6.9 The cooperative movement in India has a long history and the organisation of farmers under the 'Primary Cooperative Societies' at the grass-roots level is a nation-wide phenomenon. Data on the membership of cooperatives among farmers has been collected in Situation Assessment Survey of Farmers (2003) which has been analysed by us earlier in this Report. shows at least 30 per cent of all farmers in the country are reported as members of cooperatives. But a much smaller percentage of marginal and small farmers are members and an even smaller percentage utilise their services.
- 6.10 Farmers' membership in cooperatives do not reveal whether these cooperatives are multipurpose or single purpose societies. Most of the cooperatives, with a few exceptions are credit cooperatives. Though credit is a critical resource needed by the marginal-small farmers, cooperative credit accounts for the lowest share in the total borrowings by marginal and small farmers.

- 6.11 There are wide regional variations in the performance of cooperatives, their range of functions, and the depth of their outreach. As shown earlier, Kerala has the highest cooperative membership among marginal (58 per cent) and small (73.1 per cent) farmers as well as overall membership of farmers (59.5 per cent). It is followed by Himachal Pradesh (57.1 per cent) and Maharashtra (54 per cent). Marginal-small farmer membership in cooperatives is also considerably high in Chattisgarh, Gujarat, Haryana, Punjab and Tamil Nadu (Appendix Table A20). Several states have consciously promoted multi-purpose cooperatives which undertake input supply and marketing functions along with credit supply. In some states (such as Sikkim), cooperative focus on input supply and marketing functions rather than credit.
- There are examples of a few farmers' cooperatives organised on the basis of Mutually Aided Cooperative Society (MACS) which have been functioning very effectively. An example is the Mulakanoor Farmers' Cooperative (Karimnagar District, A.P.) is. It has been successful in undertaking multiple functions from credit provision, input provision, output purchase and certain amount of agro-processing like rice milling. Such cooperatives could also serve as a model of organising farmers. But there are two limitations. One is that it is not an exclusive organisation of marginal-small farmers but includes all classes of farmers. This cooperative is one of the exceptions, but not a rule, and in most of the others class interests have come into play in the management of cooperatives. Second, in spite of operating for over three decades now, there is no evidence of this model of cooperative being replicated anywhere in the State. Thus, it remains an exceptional model linked to certain consist quality attributed to the leadership.
- 6.13 There are other examples of successful producer cooperatives such as the milk cooperatives of Anand and of many other States including the 'Sudha' experience of Bihar.
- 6.14 All in all, it needs to be recognized that the cooperative structures still have the highest outreach among all categories of farmers. Further, there still exists potential for the development of producer cooperatives specifically for marginal-small farmers. There is also room now for formation of MACS. The formation of

informal marginal-small farmers' groups may be seen as a first step in moving towards cooperatives. Given the need for improving the non-farm component of earnings of marginal and small farmers, group formation may be seen as the beginning of skill and capacity building that would facilitate specialized multi-functional cooperatives of marginal and small farmers.

b) Producer Company Model

Of late, there are some initiatives to organise 6.15 farmers into "producer companies". In December 2002, the Indian Companies Act 1956 was amended to put in place "producer company" (PC) permitting existing Societies, Cooperatives, NGOs, Trusts, Private Limited Companies etc. to convert into producer companies or set up Greenfield PCs. The companies, in the present context, are the PCs of the farmers, by the farmers and for the farmers and are financially facilitated by the government but managed by professionals. The basic emphasis here is to make farming more professional and bring to farmer the benefits of value added by linking farm production to processing. Membership of PCs would include all classes of farmers. By nature it may attract more large farmers. However, this model can emerge out of farmers' groups or organisations which in turn would form PCs. Again, in the sequence, one can see PCs as potential extension of value addition activities to marginal-small farmers' groups.

c) Andhra Pradesh Model

- 6.16 In order to understand the implications of nurturing farmers' groups, the Commission had commissioned a study of group approaches among farmers in the state of Andhra Pradesh. It may be recalled that the state has witnessed several initiatives in organising farmers' collectives like the Mulakanoor Farmers' Cooperative, cooperative of weaker section land allottees in Srikakulam district, and of dalit women farmers under Deccan Development Society (DDS).
- 6.17 In recent years, in the context of severe distress among the marginal-small farming communities, there emerged two types of group approaches, which have been compared in the study to identify the conditions under which farmers' groups can function effectively. The two types of group approaches of Andhra Pradesh discussed

here are: Rythu Mithra Groups (RMGs) and Community Managed Sustainable Agriculture (CMSA). Rythu Mithra Group (RMG) is a programme initiated by the Department of Agriculture, Government of Andhra Pradesh and NABARD. CMSA has emerged as an addon programme of the women's Self Help Group (SHG) based Indira Kranthi Patham (IKP), which was earlier known as Velugu of the Society for Elimination of Rural Poverty (SERP).

Rythu Mithra Groups (RMGs)

The Government of Andhra Pradesh launched a programme for formation of Rythu Mithra Groups (RMGs) consisting of small, marginal and tenant farmers (including informal tenants) in June 2003. The RMGs, with about 15 members in each group, are expected to save and function on the lines of SHGs. The basic objectives of the RMG approach, in addition to credit, are: technology transfer, access to market information and market services to farmers. It is also envisaged that group approach would facilitate collective action both in input purchase and output marketing and make the entire process participatory. Initially, each RMG was provided with Rs. 2500 for capacity building, book keeping and exposure visits. Each RMG is to be provided credit to the tune of Rs. 1 lakh at subsidized (by State) interest rate of 3 per cent and the group would lend the amount to the members for investment in agriculture. The Department of Agriculture is the nodal agency and NABARD provides the refinance to these bank-linked RMGs. NABARD brought into the programme its own initiative of forming 'Farmers' Clubs'. The 'Farmers' Clubs' included all classes of farmers, and the composition of RMGs went beyond the marginal-small farmers. The pilot phase was launched in 2004-05 covering 13 districts. And credit to the tune of Rs. 28.95 crore was extended to 4504 RMGs. In 2005-06, the programme was extended to all the districts, and 12,468 RMGs were financed to the tune of Rs. 131.77 crore, with an average of Rs. 1.06 lakh per group. There were efforts to link relevant departmental programmes like Seed Village Programme, Farm Mechanization etc. to the scheme and channel the benefits through RMGs to enable their sustainability. However, the RMG programme did not make much headway because of lack of proper institutional architecture and failure on the part of capacity building.

The meagre field staff of Agriculture Department at the 'mandal' (Block) level is preoccupied with too many tasks and is hardly motivated to build capacity of farmers' organizations like RMGs. The groups formed at the village level were not brought into any federation at the village or 'mandal' level. Each RMG functioned in isolation.

Community Managed Sustainable Agriculture (CMSA)

The Community Managed Sustainable Agriculture (CMSA) is a programme that was started in December 2004, on the basis of organizational strengths acquired through years of capacity building in managing self-initiated programmes through group action under the Indira Kranthi Patham (IKP) or Velugu, as it was called in its earlier incarnation, of the Society for Elimination of Rural Poverty (SERP) started in 1999-2000. IKP is essentially an initiative to empower poor rural women through self-help groups (SHGs) promoting thrift and bank-linked subsidized credit to meet consumption needs as well as income generating activities towards eradication of poverty. However, a large proportion of the poor SHG members are also of the households belonging to small and marginal farmers. Many of them are also victims of rising input costs, crop losses due to pests and depressed prices, especially at the time of harvest. Based on their organizational strengths, the IKP groups also have initiated a number of programmes which are relevant to small, marginal and tenant farmers. Many Village Organisations (VOs) of SHGs have started Village Procurement Centres to procure agriculture commodities from the members at harvest time when the prices are depressed, to grade the commodities, to store and sell them later at higher prices on behalf of the members. The commodities procured by some of these SHG federations (VOs) include maize, paddy, gum carria etc. Women members in many places were trained in quality control, grading, logistics of stock management and accounting. Many members of the SHGs also started production of vermi-compost as a part of non-farm income generating activities. These experiences provided adequate confidence to IKP to initiate a full-fledged programme addressed to sustain agriculture based livelihoods of members of the SHGs.

6.20 In December 2004, CMSA was launched as a pilot project in Kosigi mandal with special focus on marginal and small farmers, tenants, women and agricultural workers. The thrust of the programme is on cost reduction through the adoption of Non-Pesticidal Management (NPM), (which is IPM without chemicals) technology. To begin with the technology is dependent on the use of local natural resources, it is more knowledge centric than product centric and relies more on Community Resource Persons than agricultural universities or the department of agriculture. The design of the project is based on community management - in this case VOs and their block level federations viz. Mahila Mandal Samakhyas (MMS) of the IKP. These organisations of marginal and small farmers identify a Village Activist (VA) for each village - drawn from best practicing farmers. Similarly, a Cluster Coordinator (CC) is identified for every five villages as paid activist farmer. The MMS enters an agreement with an IKP-accredited NGO with requisite capacities to provide technical support by way of training, information and campaign.

The core of the programme is carried on through 6.21 Farmer Field Schools (FFS). Every 20-25 sub-group of farmers will have one fixed day in a week for training in farm skills, field level observation and practice. The training is at the grass-root level but local knowledge intensive. The practices include ploughing in right seasons to minimize soil borne harmful insects, preparation of organic non-chemical pesticides, methods of natural control of insects, preparation of vermicompost, use of neem and other botanicals and biomass. The pilot project of CMSA which began in December 2004 in Kosigi mandal was based on the well documented NPM success of a village called Punukula in Khammam district. The pilot project began as a small experiment covering one dry crop, viz. Redgram in an extent of 225 acres. The recorded cost savings was of the order of Rs. 1200 per acre. The strength of the capacity of the SHGs and the response of marginal farmers resulted in its fast spread to other crops and districts. By 2007-08, the CMSA was extended to 18 districts covering 6.72 lakh acres in 1897 villages. The major crops covered include cotton, paddy, redgram, groundnut and chillies. There are detailed estimates of cost reduction for each of these commodities. The available data show that, on an

average, Rs. 5,400 per hectare is the unweighted average cost saving per hectare of the five crops covered. The CMSA is linked to the marketing and credit initiatives of the IKP. The resources for financing the training costs are from the registration fees for farmers through SHGs under IKP. Beside cost reduction, the impact of the CMSA on the livelihoods of the members of the SHGs of the IKP include reclaiming of land from mortgage for own cultivation, small and marginal farmers taking additional lands on lease for NPM based cultivation. Large farmers too were impressed by cost savings under NPM, but could not take to it because of labour-intensity. An unexpected positive development was the large farmers' preference to lease their land to the landless or marginal and small farmers to take advantage of savings in cost of inputs.

6.22 The programme is still in an evolving phase. What is important is the emerging organizational architecture for marginal and small farmers. It is the farmers' SHGs similar to IKP-SHG federal organization. What is visualized, and partly realized, is Farmers' SHGs, Farmer Field Schools, and Village Resource Centres as a part of the Village Level Farmers' Federations at the village level, these in turn forming Mandal Level Farmers' Federations which would be brought together into District Level Farmers' Federations. Presently, the entire CMSA works as a part of the IKP organizational structure and the synergies are immense. The CMSA received a shot in the arm in 2007-08 when the Government of India infused Rs. 182 crores to extend it as an additional programme to rain-fed areas.

6.23 The lessons of these two contrasting approaches need to be built into the proposed programme for marginal and small farmers. Without requisite links to agricultural practices and proper sustainable organizational architecture, the RMG ended up as a routine bureaucratic solution trying to exploit the mutual pressure or group guarantee element of group approach for lending and recovering loans, and that too without much progress. The group approach under CMSA, in contrast, builds upon a process of social mobilisation and capacity expansion of the poor farmers, taking into account their constraints and requirements. It brings rethinking of the whole gamut of small farmer economy from technology to evolving farmers' own enabling institutions.

It brings refreshing insights into risk management, appropriate utilization of local knowledge, potential avenues for household, farm and village level diversification, and restructuring of state support systems in the form of subsidies and infrastructure that would benefit marginal-small farmers. For instance, the articulation of the marginal and small farmers needs as seen from these farmers' SHGs shows that assistance that promotes conjunctive use of water, village level postharvest facilities like drying, winnowing and storage facilities, village level value addition to products, help in brand building for the organic products of the small farming communities and support in the form of quality education and health facilities to farmers, besides extending social security measures to these groups would go a long way in improving the livelihoods of those dependant on small farm economy.

6.24 The comparative analysis of RMGs and farmers' SHGs under CMSA shows that group approach to marginal and small farmers would succeed only if it is based on proper federal organisational architecture and substantial effort in capacity building. For the purpose of formation, promotion and capacity building of the marginal and small farmers' groups there is need for an agency or an umbrella organisation like the IKP or CMSA of Andhra Pradesh.

d) SEWA Model

6.25 In principle, what we briefly narrate here as 'SEWA Model' of organising marginal-small farmers is akin to CMSA Model of Andhra Pradesh. SEWA, essentially a trade union of women, has acted with its experience in social mobilisation, capacity building and its own credit providing capacity through SEWA Bank, acted as an agency (like the CMSA) in forming village level farmers' collectives or groups. Beginning with the formation of a women's cooperative (Mehsana Cooperative) of 41 SEWA members to cultivate tree crops in a leased land of 11 acres, SEWA has so far organised 100 farmers' collectives or groups, and formed them into District Federations, in six districts. These initiatives in many cases were linked to larger programmes like watershed development (Subarnakantha – 1996 – World Bank) and rehabilitation of displaced villages (Sukra, World Bank 1993).

6.26 In all these cases SEWA has acted as the promotional agency. SEWA organises women farmers into groups or cooperatives. SEWA provides to these groups capacities in accounting skills, training in latest farming techniques and establishes Village Resource Centers (VRCs). SEWA promoted thrift among the groups and SEWA Bank and other sources have provide for the credit needs of these groups. The groups are also linked to seed companies, research institutes and marketing organisation. SEWA also organises Krishi Bazaars (agricultural markets) bi-annually for selling the farm produces. An interesting dimension is, provision of health care, child care and children's educational facilities to the members of these groups.

6.27 The SEWA Model shows the potential of organising marginal-small farmers into small groups but again emphasises the importance of an 'agency' – an umbrella organisation – in social mobilisation, handholding, and capacity building as essential requirement for sustained functioning of informal farmers' groups or collectives which can in some cases grow into formal cooperatives.

FAO Experience

6.28 To enable marginal-small farmers to overcome their poor economies of scale, poor bargaining power and failure of delivery of state support services reaching them, the UN Food and Agricultural Organisation (FAO) initiated group approach way back in 1970s. It yielded positive results in several countries (Rouse 1996). The experience of CMSA of Andhra Pradesh and the FAO experience in working with the marginal-small farmers' groups offer the following lessons for successful organisation of these groups:

- Developing sustainable marginal-small farmer groups is a long-term process. It requires a minimum of 3 to 4 years of training and capacity building.
- The groups are to be small ranging from 10 to 15 members. Members should be of homogenous background with common interests and similar resource base.
- The use of specifically-trained resident group organisers is fundamental to success. The group

- <u>promoters</u> withdraw gradually once the groups acquire capacity to run their affairs.
- iv) There is need for an 'agency' at the State/District level to facilitate group formation, help them federate and build their capacity in improving their economic activities as much as accessing the benefits state programmes and other facilities aimed at them.

Concluding Observations

6.29 There is universal recognition of the need for organising marginal-small farmers to gain economies of scale, to improve bargaining power and to make their voices heard – all with a view to improve their productivity, to diversify their sources of income and to improve their conditions of living. The recent experience shows, of the several approaches to organising marginal and small farmers, cooperatives and formation of farmers' groups on the lines of SHGs hold greater promise. While there are some successful farmers' cooperatives,

there are also instances of spread of other types of producer and marketing cooperative societies as well as mutually aided societies. Most of the latter are based on local initiatives. In contrast, formation of marginal and small farmers' groups on the lines of SHGs has developed under agency structures such as the IKP or CMSA in Andhra Pradesh, 'Kudumbashree' in Kerala and SEWA in Gujarat. Beginning of such initiatives are seen in Tamil Nadu, West Bengal, Orissa and Madhya Pradesh as well. The main lesson of these experiences is that capacity building and group formation among the poor marginal and small farmers can not be simply seen as an extension of routine departmental activity and as one of the many activities that a programme may seek to promote. Wherever there are no farmers' cooperatives, these experiences hold adequate prominence for organising marginal and small farmers into groups through a dedicated 'agency' meant for their promotion and capacity building.

7

Elements of the Special Programme for Marginal and Small Farmers

- As noted above, the Commission in its 2007 Report has stressed the need for a focused strategy with respect to marginal and small farmers and has advocated a package of measures for these farmers. Since then, the Government of India has taken a number of initiatives designed to improve the lot of farmers and of agriculture. We have briefly discussed these initiatives earlier in this Report. The approach taken by the 11" Plan is to shift towards decentralised agricultural planning based on a convergent approach and use of additional resources to plug gaps and focus on activities which are important for bringing about a growth of the agricultural sector. This is a sound approach which will prevent a duplication of effort and will lead to locally appropriate strategies.
- 7.2 Our own analysis shows that group based approaches, although in their infancy, can make a significant impact on the agricultural practices of marginal-small farmers and also enable them to avail of economies of scale in certain spheres such as marketing. We have noted that the National Policy on Farmers earlier in this report also believes that the future of Indian farming lies in different types of group approaches. Our emphasis in this document is on strengthening the "back-end" i.e. the capacity of farmer groups to internalise value chains to the extent possible.

- Having done this, farmer groups will no doubt have to interact with market-based institutions in different formats which are advantageous to them (say, through contract farming). This report does not deal with the many emerging formats through which corporates/co-operatives are strengthening backward linkages with the farm economy.
- 7.3 Further, our analysis earlier in this report, as also supported by the Eleventh Plan, makes it clear that the capacity of the agricultural sector to absorb the increasing labour force is limited and there is a need to diversify to other non-farm and off farm employment in rural areas. Thus a strategy for marginal and small farmers can not remain confined to agriculture and must recognise the need to generate more employment opportunities through skill development, rural diversification and development of off-farm and non-farm activities.
- 7.4 We have also analysed the gender and social composition of marginal and small farmers in this Report and have highlighted the special need to focus on issues arising out of discrimination and neglect of women farmers and farmers belonging to deprived social groups. The gender dimensions of agriculture and the need to address gender issues has also been highlighted by the Planning Commission Steering Group and the 11th Plan, among others. It follows from this any

thrust on the weaker sections in agriculture must be gender and socially sensitive.

- 7.5 All this, in our view, leads to the following main conclusions. First, there is need for targeted interventions focusing on this segment of farmers (marginal and small farmers). Second, many of the disadvantages faced by these farmers can be overcome if they come together as a group, pooling their resources, collectively participating in markets and making a demand for public goods & services. Thus there is need for a group approach to enhance their farm and non-farm productivity and thereby income. Third, a strategy for marginal and small farmers must focus on generating more and better quality off-farm and non-farm employment for them through skill development and other measures.
- 7.6 It may be noted that in many respects the 11th Plan approach is similar to that recommended by this Commission. The Plan document states that:
- 7.7 "Given that 80 per cent of farmers are small and marginal, and, increasingly female, special steps will be needed to improve their effective access to inputs, credit, extension services and output markets. It is now well recognized that the poor are best empowered if they function as a group rather than as individuals and that this is also the best way to secure economies of scale. Hence for the poor and for women to gain and be effective farmers we should encourage a "group approach"."(Planning Commission 2007e).
- 7.8 However, while the National Policy for Farmers and the 11th Plan aptly recognize the need to focus on marginal and small farmers and emphasise a group approach, they do not suggest any programme or measure which is either specifically targeted at these farmers or which can implement a fresh approach towards them. There is an implicit assumption that either a sectoral approach or an approach addressing issues all farmers will also address the special issues confronting marginal and small farmers. Consequently, the focus on marginal and small farmers leaves a lot to be desired and that too in a period when agrarian developments have increased the urgency for a distinct and focused strategy for this segment.
- 7.9 We wish to reiterate that the problems of marginal-small farmers need a different approach and a

specific focus. General programmes are not able to address their special needs and constraints, and as a result, the productivity and income opportunities for these farmers do not fully open up. The Commission therefore is of the view that its earlier recommendation of a special programme for marginal and small farmers at this juncture remains both valid and urgent. Further, building capacity of small-marginal farmers through a group based approach will be the key ingredient in the proposed Special Programme since our analysis shows that group based approaches can make a significant impact on the agricultural outcomes for marginal-small farmers, while also enabling them to access credit and other resources, and helping them to undertake non-farm activities,.

7.10 Given this background, the Commission has now proposed the special programme for marginal and small farmers, the elements of which are described below.

Objectives

- 7.11 The Special Programme for marginal and small farmers will have the following general objectives:
- To improve the income prospects of marginalsmall farmers from agriculture.
- To improve the skill base of marginal-small farmers in both agricultural and nonagricultural activities.
- To provide such farmers with income earning opportunities in the non-farm sector.
- iv. To ensure that the needs of the marginal and small farmers are adequately reflected in other agricultural and development programmes and to ensure their access to these programmes in order to strengthen their livelihood security.

Principal Activities proposed under the Special Programme

7.12 (a) Promotion of Marginal–Small Farmers' Groups:
One of the first and important functions of the Programme will be the promotion of formation of marginal and small farmers' self-help groups. Given the fact that in many states such groups are far and few, special efforts will have to be made to facilitate formation of such groups/organisations. The Special Programme proposes setting up of Marginal and Small Farmers' Development Society

(MSFDS) for the promotion, capacity building and coordination of development of marginal and small farmers' groups. The Society should identify and train a team of Community Resource Persons for formation of the groups. Wherever NGOs engaged in the promotion of rural livelihoods exist, they could play important role in the formation of the groups. Noting that this segment is socio-economically heterogeneous, adequate emphasis must be given to promoting groups and capacity building among farmers belonging to the weaker sections (submarginal and marginal farmers and those belonging to socially deprived groups).

- (b) Enabling Greater Access to Institutional Credit: Linking the M-S farmers' groups to banks is an essential step towards adequate flow of institutional credit to these farmers. This linking could be done on the pattern of the existing SHG-bank linkage programme. The objective is that adequate institutional credit should be able to reach all marginal and small farmers, whether owners or tenants.
- Training and Capacity Building: Since farming is becoming increasingly knowledge based, training marginal and small farmers in appropriate technical and farming practices specific to different regions becomes an urgent need. The existing institutional set up, from the village right up to district level like FFS at the village level or training facilities at the higher levels, are not accessed by most marginal and small farmers. The special programme aims at motivating and enabling marginal and small farmers to acquire skills by establishing Community Resource Centres, by promoting marginal and small farmer activists at the village, cluster, and block levels, and by promoting training of Trainers and training of marginal and small farmers. The marginal and small farmers' groups will be the basic units for this intervention and grass-roots agencies will enable them to link up with existing facilities and programmes.
- (d) Support for Strengthening and Creation of Non-Farm Activities: Given the fact that income from small farming is hardly sufficient to meet the basic needs of the farm households, it is important to strengthen and enhance their sources of non-farm income. Some of these are organically linked to farming as in the case of dairying, livestock rearing, inland fishing, food processing, weaving

- as in the North-east, and so on. In addition there will also be non-farm activities that could be accessed by members of the small farmer households. A number of schemes and programmes exist for rural non-farm activities such as PMEGP and SGSY. In addition various forms of assistance are also available from a number of other agencies and departments. In states where women's groups are active, a number of them have started non-farm enterprises with a local market for the products and services. The programme aims at bridging the farm activities and non-farm activities of marginal and small farmers by a facilitating role through dissemination of information, education and training, linkage with banks and other agencies and organising technical and managerial help.
- (e) Gender-focused Activities: Recognising that farming is increasingly feminised, the Special Programme's initiative of marginal and small farmer group formation would aim at these groups having an adequate number of women or exclusively women farmers as well. The Programme would play a leading role in facilitating a gender sensitive marginal and small farmer development strategy. These include mapping the existing role and constraints on women farmers, support and organise training and skill development programmes for women farmers. The Programme should also promote joint ownership or leasing and operation, or usufructuary rights over existing productive assets (land, trees, ponds, CPRs) as well as new ones among women farmers through SHGs, co-operatives etc. This will go a long way in supporting and strengthening such activities that have already made a beginning in such states as Kerala (through Kudumbasree) and Andhra Pradesh (through the CMSA of the Indira Kranthi Pratham) which show that women as a group can overcome the constraints of access to credit, land and other productive assets and play a critical role in improving the social and economic status of their families.
- (f) Planning for Development of Marginal and Small Farmers: While the Special programme would initiate the activities outlined above, the MFSDS would also develop a strategy for the medium term development of marginal and small farmers. The strategy will essentially have a bottom-up approach. The primary information on the nature of problems faced by the marginal and

small farmers, the nature of solutions that they conceive, and the kind of interventions that they expect should be drawn up from the marginal and small farmers groups right from the village and panchayat level. These grassoots perceptions should be combined with an assessment of the numbers of marginal and small farmers, their spread in terms of agro-climatic specificities, the availability of infrastructure facilities including those relating to input supply and output marketing, institutions of credit, training etc. Based on this exercise, the proposed strategy would suggest locally relevant development strategies which are also sensitive to the internal socio-economic differentiation of this segment and growing feminisation of this workforce, and set quantitative targets. Special stress will be laid on dovetailing the requirements of the small farmers with all existing programmes, particularly the NADP, NFSM, NREGP, BGRF, PMRY and the SDM. The Society will have the responsibility to ensure that this plan will be incorporated as a sub-plan in the district and state agriculture plans, which are being formulated as per the C-DAP model guidelines.

Implementation Mechanism

7.13 It is proposed that for the implementation of the programme and for operationalisation of its key ingredient viz. group approach and capacity building, each state should constitute an agency at the District level, which may be called as <u>Marginal and Small Farmers</u> <u>Development Society</u> (MSFDS) to be registered under the Charitable Societies Act.

7.14 The prime mission of the Society is to promote group formation of marginal and farmers and build capacity to enable them not only to develop their own initiatives towards their economic and social development but also to effectively access the state support programmes aimed at them. Within such a national framework, states have to set out with appropriate institutional framework for group development as warranted by the regional context.

7.15 The MSFDS would be headed by the District Collector or the CEO of the ZP and will be assisted by a team of professionals in agriculture, rural development, social work and planning. The organisation would require a flexible and autonomous structure, involving NGOs and independent institutions for group formation planning,

monitoring, training, etc. MSFDS, functioning in a fully promotional manner, will be able coordinate with several line departments such as the departments of agriculture, rural development, panchayati raj, industries, employment and training are already critically involved in the implementation of programmes which have a bearing on marginal and small farmers. It is envisaged that the proposed society will improve the convergence between them and serve as an agency for bringing their benefits to the marginal and small farmers. This 'agency model' of MSFDS may also consider involving non-profit institutions such as non-government development organisations, charitable trusts, research and development institutions, academic institutions as well as private and public sector companies in strengthening the marginalsmall farmers' groups through a variety of activities.

7.16 The Commission has noted that the government has recently taken a decision to extend the Agricultural Technology Management Agency (ATMA) to all districts in the country. The agency has the main responsibility for all technology dissemination activities at the district level. The Agency has linkages with all line departments, research organizations, non-governmental organizations and agencies associated with agricultural development, and a substantial representation of farmer organizations. ATMA is set up as an autonomous body under the Societies Act with participation of all key stake holders. It has a Governing Board (headed by the Collector) and a Management Committee (headed by the Senior most agricultural officer) at the district level. At the Block level, it has a Block Technology Team (BTT) and a Farmers' Advisory Committee (FAC). It has a State level Inter-departmental Working Group headed by the APC. The ATMA formulates the Strategic Research and Extension Plan (SREP) and the Extension Work Plans. In all, the ATMA provides for participation by the stakeholders giving due representation to women farmers, and farmers from weaker sections. Thirty per cent of the resources meant for extension workers are proposed to be spent on women farmers. The programme also proposes a large cafeteria of activities which includes group formation, which is expected to strengthen the demand-led features of the programme, and improved linkage with credit institutions. There is thus some commonality between the Special Programme proposed

by the Commission and ATMA. But while the ATMA is focused on technology dissemination among all categories of farmers, the Commission's special programme is focused on group formation and capacity building among marginal and small farmers only. Besides, the Programme's capacity building extends to both promotion of both farm and non-farm activities among this segment of farmers.

7.17 However, in its discussions with the Commission, the Ministry of Agriculture has expressed a preference for incubating the Special Programme within an existing institution and gradually taking the lessons forward. In this case, an alternative to the Commission's main proposal of setting up the MFDS as an autonomous society from the very beginning in all the states, the Special Programme could be initially housed with the ATMA as an autonomous unit which may be called the Marginal and Small Farmers' Development Organisation (MSFDO). The MSFDO will have an independent management committee which will be headed however, as in the case of ATMA, by the senior-most agricultural officer of the district.

Financial Resources

- 7.18 The financial resources meant exclusively for this programme will be an additionality over and above what is provided in the existing schemes. The total cost of this Programme is initially estimated at about Rs 2000 crores per year or an average of about Rs 3 to 5 crore per district. This amount can be increased as the capacity of the MSDS to undertake activities mentioned below, or other activities entrusted to it increases. The total amount would be allocated to the states/districts in proportion to the marginal and small farmers in each area.
- 7.19 The dedicated budget of the programme will be used mainly for capacity building, group formation, incentivising group formation, training, transfer of technical know-how, activities linked to promotion of federations of producer groups in some form, with additional provision for meeting important gaps in the development plan for marginal and small farmers. Thus, the financial resources earmarked for the Society will take into account the following requirements:

- (i) Motivation and capacity building for group formation, gradual federating of such groups, and hand holding are highly skilled and effortintensive exercises which will require support under the programme. The Commission has discussed the ingredients of some of the successful models of group based approaches like the Community Based Sustainable Agriculture (CMSA) approach in Andhra Pradesh, producer co-operatives and the SEWA model.
- (ii) As we have mentioned earlier, training for skill formation would be an important component of the programme. The training provided would be either for agricultural purposes and linked to capacity creation under this programme or for enterprise promotion where it would be linked to the PMEGP. The objective of training will also be to provide marketable skills to the recipients and hence it is desirable that all training be linked to certification under the Modular Employable Skills Programme of the DGET.
- (iii) The subsidy levels for individual components would be the same as those specified under the SGSY, ATMA, NFSM and other programmes. However, in order to promote group formation, an additional subsidy of 10 per cent would be provided to farmers' groups, accordingly to laid down criteria.
- 7.20 The Commission favours extension of the targeted approach to other programmes. Some of these specify small targets for marginal and small farmers while in other cases no targets are specified. Thus it is expected that clear and specific targets be laid down for marginal and small farmers under the Centrally Assisted programmes, such as the NADP, NFSM and MMA.. Since nearly 85 per cent farmers are marginal and small farmers (of which nearly 40 per cent are women) and these farmers cultivate about 44 per cent land, producing more than half the output, and since proportionately greater weightage should be given to supporting this segment, we are of the view that at the national level at least 70 per cent of the direct benefits of these programmes should accrue to marginal and small farmers and at least 40 per cent of such benefits should accrue to women

farmers. Separate targets can be specified for each of the two sub-groups (marginal and small farmers) as well as for farmers from socially deprived status. Similar targets need to be set at each local level depending upon the significance of marginal-small farmers and the different sub-groups in the area, and aggregated upwards to the state level.

- 7.21 Since the SGSY is meant almost entirely for BPL households and would cover a very small segment of the marginal and small farmers, it is recommends that a clear target also be set (not less than 70 per cent of the rural target) for the new PMEGP for marginal and small farmers to channelise support to them for setting up non-farm business enterprises.
- 7.22 The total amount spent on marginal and small farmers would thus be much larger than the amount allocated to the Special Programme, being equal to 70 per cent of the amount allocated under the NADP, MMA and the NFSM, the dovetailed amount from the other programmes, and the increased allocation to the PMEGP.

Monitoring and Evaluation

7.23 Two kinds of monitoring and evaluation are called for in the case of this Special Programme. One is the Monitoring and Evaluation (M&E) of the various programmes that are intended to benefit the small farmers. The second is the monitoring and evaluation of the functioning of the proposed Special Programme.

- 7.24 The first task will have to be taken by up the MSFD Societies. They will monitor the impact of all the relevant programmes in terms of their intended benefits to small farmers. This will be done in a participatory fashion involving the farmers' groups and the PRIs and finally presented in an annual progress report for wider discussion and dissemination. This will list each scheme/project/programme and record their achievements as well as their constraints and shortcomings. It can also suggest corrective measures with a view to improve the effectiveness and outreach of the concerned activity. It may also articulate the need for local level innovations/ adaptations that are feasible and cost effective.
- 7.25 The second task is to monitor and evaluate the Special Programme itself. This should be carried out in a participatory manner by the farmers' groups and PRIs, as well as by external agencies at periodic intervals, say every three years, according to a suitable design appropriate to the state level conditions and context but within a broad national framework. The Programme Evaluation Division of the Planning Commission should carry out a separate evaluation that could draw from the state level annual progress reports as well as independent evaluation of randomly selected district level Societies.
- 7.26 Thus the M&E will be a combination of monitoring of the small farmer-oriented programmes as well as that of the Special Programme through a participatory exercise, as well as through external evaluations.

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Abbrevations & Acronyms

APC Agriculture Production Commissioner

APMC Agriculture Produce Marketing Committee Act
ATMA Agricultural Technology Management Agency

BGRF Backward Region Grant Fund

BTT Block Technology Team

CC Cluster Coordinator

C-DAP Comprehensive District Agricultural Plan

CEO Chief Executive Officer
CGF Credit Guarantee Fund

CMSA Community Based Sustainable Agriculture
CMSA Community Managed Sustainable Agriculture

CPR Common Property Resource
DAP District Agricultural Plan

DDP Desert Development Programme

DDS Deccan Development Society

DGET Directorate General of Employment & Training

DPAP Drought Prone Area Programme
FAC Farmers' Advisory Committee

FAO Food and Agricultural Organisation

FFS Farmer Field Schools
GCA Gross Cropped Area
GOI Government of India
HYV High Yielding Variety

ICAR Indian Council for Agriculture Research

IKP Indira Kranthi Patham

IPM Integrated Pest Management

IRDP Integrated Rural Development Programme

M&E Monitoring and Evaluation

MACS Mutually Aided Cooperative Society

MFALDA Marginal Farmers and Agricultural Labourers Development Agencies

MMA Macro Management of Agriculture

MMS Mahila Mandal Samakhyas

MSFDO Marginal and Small Farmers' Development Organisation

MSFDS Marginal and Small Farmers' Development Society

MSME Ministry of Micro, Small and Medium Enterprises

MSP Minimum Support Price

MT Metric Ton

MWS Million Wells Scheme

NABARD National Bank for Agriculture and Rural Development

NADP National Agricultural Development Programme

NBC Net Bank Credit

NCEUS National Commission for Enterprises in the Unorganised Sector

NCF National Commission of Farmers
NFSM National Food Security Mission
NGO Non-Governmental Organisation
NHM National Horticulture Mission

NPF National Policy for Farmers NPM Non-Pesticidal Management

NREGA National Rural Employment Guarantee Act

NREGP National Rural Employment Guarantee Programme

NSS/NSSO National Sample Survey (Organisation)

NTFP Non Timber Forest Produce

OBC Other Backward Class

PC Producer Company

PMEGP Prime Minister Employment Generation Programme

PMRY Prime Minister's Rojgar Yojana

PRI Panchayati Raj Inistitution

RBI Reserve Bank of India

RKVY Rashtriya Krishi Vikas Yojana

RMG Rythu Mithra Groups SAP State Agriculture Plan

SC Schedule Caste

SDM Skill Development Mission

SERP Society for Elimination of Rural Poverty
SEWA Self Employment Women's Association
SFDA Small Farmers Development Agencies

SFMFALDA Small Farmer Marginal Farmer Agriculture Labour Development Agency

SGSY Swaranjaynati Gram Swarozgar Yojana

SHG Self Help Group
ST Schedule Tribe
UN United Nations
VA Village Activist

VO Village Organisation

VRC Village Resource Centers

WDP Watershed Development Programme

WTO World Trade Organisation

ZP Zilla Parishad

Appendix Tables

Table A1: Percentage Land Possessed

State	Marginal	Small	Marginal & Small	Medium & Large	Total
Tripura	58.5	39.4	97.9	2.1	100
Manipur	65.2	28.9	94.1	5.9	100
Nagaland	41.4	44.7	86.1	13.9	100
West Bengal	60.8	22.2	83.0	17.0	100
Uttranchal	63.8	17.6	81.4	18.6	100
Kerala	56.8	23.0	79.8	20.2	100
Sikkim	50.1	27.4	77.5	22.5	100
Himachal Pradesh	44.8	28.9	73.7	26.3	100
Orissa	50.7	22.5	73.2	26.8	100
Jharkhand	44.6	28.5	73.1	26.9	100
Assam	43.1	29.4	72.4	27.6	100
Bihar	46.3	20.9	67.2	32.8	100
Jammu & Kashmir	43.3	23.1	66.4	33.6	100
Uttar Pradesh	36.8	22.6	59.4	40.6	100
Mizoram	29.5	25.0	54.5	45.5	100
Tamil Nadu	33.5	20.9	54.4	45.6	100
Meghalaya	30.8	20.0	50.9	49.1	100
Chattisgarh	24.3	25.1	49.4	50.6	100
Andhra Pradesh	26.3	21.2	47.5	52.5	100
Haryana	21.2	21.0	42.2	57.8	100
Arunanchal Pradesh	12.1	26.4	38.6	61.4	100
Karnataka	18.5	18.9	37.4	62.6	100
Madhya Pradesh	17.1	17.2	34.3	65.7	100
Gujarat	15.4	18.8	34.3	65.7	100
Maharahtra	12.2	19.4	31.7	68.3	100
Punjab	11.3	18.6	29.9	70.1	100
Rajasthan	11.1	11.5	22.6	77.4	100
All India	26.3	19.8	46.1	53.9	100

Note: All India includes small states as Goa, Delhi, Pondicherry,& UTs.

Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003

Table A2: Percentage of Operational Holdings during the Agricultural Year 2002-03

State	Marginal	Small	Marginal & Small	Medium & Large	Total
Manipur	82.1	16.6	98.7	1.3	100
Tripura	92.8	4.8	97.6	2.4	100
West Bengal	86.7	9,0	95.8	4.3	100
Kerala	86.7	8.5	95.2	4.8	100
Jharkhand	79.6	15.2	94.8	5.3	100
Uttranchal	87.2	7.4	94.7	5.4	100
Himachal Pradesh	78.7	15.2	94.0	6.0	100
Bihar	81.3	11.5	92.8	7.2	100
Orissa	77.7	13.6	91.3	8.7	100
Jammu & Kashmir	77.9	13.3	91.2	8.8	100
Uttar Pradesh	75.7	14.8	90.5	9.6	100
Nagaland	54.2	35.8	90.0	10.0	100
Assam	67.5	20.3	87.8	12.2	100
Sikkim	72.3	14.5	86.8	13.2	100
Tamil Nadu	72.1	13.9	86.1	13.9	100
Mizoram	53.6	28.9	82.5	17.5	100
Andhra Pradesh	61.5	19.1	80.6	19.4	100
Meghalaya	62.1	17.2	79.4	20.7	100
Chattisgarh	54.2	24.6	78.8	21.2	100
Haryana	61.4	17.3	78.8	21.2	100
Punjab	61.2	15.9	77.1	22.9	100
Karnataka	53.1	22.0	75.1	25.0	100
Gujarat	54.3	20.6	74.9	25.1	100
Maharahtra	43.0	24.7	67.8	32.2	100
Arunanchal Pradesh	36.5	30.9	67.4	32.6	100
Rajasthan	47.1	19.8	66.9	33.1	100
Madhya Pradesh	41.9	24.7	66.5	33.5	100
All India	66.6	16.9	83.5	16.5	100

Note: Total includes the small states Goa, Delhi, Pondicherry, & UTs.

Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003

Table A3: Share of Marginal and Small Farmers in Total Output

State	Marginal	Small	Marginal & Small
West Bengal	61.0	25.3	86.2
Jharkhand	50.2	27.9	78.1
Kerala	53.8	24.3	78.1
Jammu & Kashmir	51.1	26.3	77.3
Himachal Pradesh	43.4	30.5	73.9
Orissa	45.3	27.2	72.5
Assam	39.5	31.3	70.7
Bihar	44.2	25.1	69.2
Uttar Pradesh	37.3	27.8	65.1
Tamil Nadu	34.9	16.8	51.7
All India	29.1	22.1	51.2
Uttaranchal	38.7	8.0	46.7
Andhra Pradesh	23.1	23.6	46.7
Chhattisgarh	20.8	25.3	46.1
Karnataka	18.0	20.4	38.5
Gujarat	15.7	19.6	35.3
Maharashtra	14.8	20.4	35.2
Rajasthan	17.0	16.2	33.2
Haryana	14.8	15.1	29.9
Madhya Pradesh	11.5	16.5	27.9
Punjab	6.9	12.5	19.3

Note: All India includes small states as Goa, Delhi, Pondicherry, North Eastern States & UTs Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003

Table A4: Value of Output per Hectare (Rs.)

State	Marginal	Small	Marginal & Small	Medium & Large	All
Punjab	29448	26120	27213	28983	28623
Kerala	26485	27576	26814	28655	27197
Jammu & Kashmir	26774	24768	26057	16914	23214
West Bengal	21065	20429	20874	19004	20594
Assam	18484	17370	17975	18296	18068
Haryana	17769	16872	17304	17541	17470
Uttaranchal	15405	12694	14859	69131	25536
Andhra Pradesh	14777	14849	14813	12886	13720
Uttar Pradesh	14442	14441	14442	15611	14826
Himachal Pradesh	12680	17650	14347	19198	15362
Tamil Nadu	15629	11353	13926	15799	14771
Bihar	14230	13184	13833	13847	13837
Jharkhand	14275	12457	13568	11420	13034
Maharashtra	13212	11350	12064	7140	8339
Karnataka	11727	12178	11962	10194	10809
Gujarat	12001	11656	11807	11504	11609
Chhattisgarh	8612	8128	8339	7953	8126
Madhya Pradesh	8543	7546	7927	8783	8526
Orissa	7207	6374	6870	6731	6831
Rajasthan	7177	5629	6330	4213	4739
All India	14754	13001	13944	11333	12535

Note: All India includes the small states Goa, Delhi, Pondicherry, North Eastern States & UTs Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003

Table A5: Percentage of Operated Area Leased-In

State	1953-54	1972-72	1981-82	1992-93	2002-03*
Andhra Pradesh	21.2	9.0	6.2	9.6	9.0
Assam	43.0	16.7	6.4	8.9	5.3
Bihar	12.4	14.5	10.3	3.9	8.9
Gujarat	19.4	3.9	2.0	3.3	5.1
Haryana	39.8	23.3	18.2	33.7	14.4
Himachal Pradesh	NA	15.9	3.2	4.8	NA
Jammu & Kashmir	22.1	8.1	2.5	3.7	NA
Karnataka	21.5	15.9	6.0	7.4	3.6
Kerala	20.2	8.6	2.1	2.9	4.0
Madhya Pradesh	19.8	7.5	6.6	6.3	3.6
Maharashtra	19.7	6.2	5.2	5.5	4.7
Orissa	12.6	13.5	9.9	9.5	13.0
Punjab	39.8	28.0	16.1	18.8	16.8
Rajasthan	21.0	5.3	4.3	5.2	2.8
Tamil Nadu	27.0	13.1	10.9	10.9	6.0
Uttar Pradesh	11.4	13.0	10.2	10.5	9.5
West Bengal	25.4	18.8	13.4	10.4	9.3
All India	20.6	10.6	7.2	8.3	6.5

Note: *Data for 2002-03 pertain to the kharif season.

All India includes small states as Goa, Delhi, Pondicherry, North Eastern States & UTs

Source: National Sample Survey on Land Holding, NSS 8th round, No.36 1954-55; NSS 17th round No.144 1961-62; NSS 26th round No.215 1971-72, NSS 37th round, Nos.330 and 331 1982, 48th round Nos.388, 1992 and 59th round, Nos.492, 2006.

Table A6: Awareness of bio-fertilizer, MSP & WTO by Size of Holdings (Percentage of Farmer Households) 2003

Small Large			A & A Large Small	
Name of the last o			na co	
3.9 11.9	55 25.6	313	27.0 38.2	29.1
9.8 5.1	8.2 23.0	21.9	22.5 23.4	228
10.1 13.3	10.5 18.6	, 26.2	203 30.5	21.6
7.5 19.1	8.3 15.9	283	17.4 36.6	187
0.8 3.5	1.4 33.0	35.6	33.8 40.8	35.3
5.7 6.0	5.8 17.4	30.7	20.9 37.5	25.0
7.7 24.7	11.4 49.7	72.5	545 785	59.6
8.4 5.8	82 19.1	32.7	21.3 32.5	22.0
7.2 6.6	7.2 27.8	36.2	27.6 21.0	27.0
10.3 17.9	10.7 11.2	15.6	11.9 22.1	12.5
5.2 12.4	7.0 22.8	32.7	25.7 40.0	29.2
43.3 58.1	44.0 59.1	78.5	699 209	0.10
1.4 5.6	2.7 21.1	283	23.9 40.7	29.4
3.6 10.7	5.8 17.1	30.9	222 39.4	27.6
3.6 13.9	3.7 2.2	1.8	22 92	22
14.0 9.2	13.1 16.3	30.5	17.2 27.2	192
16.0 8.0	147 145	15.7	14.9 15.6	15.0
30.5 34.9	30.7 8.6	10,6	9.3 8.3	92
1.9 6.4	23 10.1	161	11.0 26.4	123
18.4 39.6	23.1 45.8	81.0	52.9 89.4	0.19
1.7 3.5	23 7.0	10.6	8.0 15.6	10.5
7.4 3.6	6.9 7.2		7.7 5.5	7.4
10.2 23.9	121 43.7	210	44.8 60.1	46.9
4 F99m 20037	9.7 33.4	328	33.3 19.2	33.1
3.8 12.1	45 27.5	44.8	30.2 57.0	32.6
12.3 26.4	13.0 20.2	46.9	22.1 39.4	23.0
11.6 17.7	11.8 28.7	39.3	29.6 42.9	30.2
o man		0.000	28.7	28.7 39.3 29.6

Table A7: Net farm Income per Hectare of Cropped Area from Cultivation

State	Marginal	Small	Marginal & Small	Medium & Large	All
Andhra Pradesh	4224	5043	4637	5359	5047
Assam	15765	14682	15269	15238	15260
Bihar	7997	7566	7834	8479	8032
Chhattisgarh	5317	5157	5227	4468	4809
Gujarat	5717	5875	5806	5536	5630
Haryana	9922	9151	9523	8155	8567
Himachal Pradesh	7887	11674	9157	11785	9707
Jammu & Kashmir	20330	20295	20317	13079	18067
Jharkhand	10655	9406	10169	8898	9854
Karnataka	5695	6333	6028	5672	5796
Kerala	16829	18109	17216	15799	16921
Madhya Pradesh	5294	4060	4531	5203	5001
Maharashtra	6547	5712	6032	3653	4232
Orissa	3448	3096	3306	2939	3204
Punjab	18582	15780	16701	16615	16632
Rajasthan	2651	1392	1962	1345	1499
Tamil Nadu	6088	3658	5120	7723	6295
Uttar Pradesh	6700	7399	6998	8281	7421
Uttaranchal	11286	8527	10730	64752	21358
West Bengal	9528	9444	9503	9512	9503
All India	7809	6955	7414	6080	6694

Note: All India includes the small states Goa, Delhi, Pondicherry, North Eastern States & UTs Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003

Table A8: Income and Consumption per Farmer Household (Rs. per month), by Size Category of Farmers

State		Marginal			Small			Semi-medit	ım
		Consu- mption	Difference	Income		Difference	Income		Difference
Andhra Pradesh	1235	2159	-924	1837	2549	-712	2590	3045	-455
Bihar	1439	2254	-815	2667	3246	-579	4460	3599	861
Chhattisgarh	1187	1754	-567	1684	2204	-520	2858	2681	177
Gujarat	1931	2725	-794	2815	3386	-571	3757	3698	59
Haryana	2155	3820	-1665	2919	5233	-2314	4289	5122	-833
Jharkhand	1814	1835	-21	2713	2149	564	4901	2674	2227
Karnataka	1951	2262	-311	2474	2693	-219	3796	3262	534
Kerala	3602	4075	-473	6290	5262	1028	10639	7178	3461
Madhya Pradesh	1099	1973	-874	1193	2241	-1048	1439	2720	-1281
Maharashtra	1761	2467	-706	2183	2583	-400	3525	3026	499
Orissa	901	1578	-677	1425	2034	-609	2456	2688	-232
Punjab	2840	3900	-1060	4462	5452	-990	6605	5860	745
Rajasthan	1427	2809	-1382	1650	3668	-2018	1678	3875	-2197
Tamil Nadu	1739	2285	-546	2244	3187	-943	3658	3691	-33
Uttar Pradesh	1198	2526	-1328	2428	3728	-1300	3978	4948	-970
West Bengal	1862	2517	-655	3643	3877	-234	5993	4754	1239
All India	1659	2482	-823	2493	3148	-655	3589	3685	-96

cont..

State		Medium			Large			All	
		Consumption	Difference		Consu- mption	Difference	Income		Difference
Andhra Pradesh	5479	4133	1346	9418	5724	3694	1634	2386	-752
Bihar	9526	5678	3848	27766	8174	19592	1810	2459	-649
Chhattisgarh	3860	3716	144	10500	5161	5339	1618	2045	-427
Gujarat	6355	4687	1668	5084	4391	693	2684	3127	-443
Haryana	5353	6463	-1110	16110	8234	7876	2882	4414	-1532
Jharkhand	7990	2773	5217	23433	3251	20182	2069	1897	172
Karnataka	5178	3563	1615	16837	8844	7993	2616	2608	8
Kerala	15045	8820	6225	***	***	***	4004	4250	-246
Madhya Pradesh	3066	3667	-601	8000	6108	1892	1430	2339	-909
Maharashtra	6244	3877	2367	15653	7241	8412	2463	2689	-226
Orissa	3724	2771	953	11451	5314	6137	1062	1697	-635
Punjab	13770	7836	5934	34340	13078	21262	4960	4840	120
Rajasthan	1682	4368	-2686	706	4939	-4233	1498	3288	-1790
Tamil Nadu	9061	3793	5268	26984	9030	17954	2072	2506	-434
Uttar Pradesh	7974	6732	1242	7850	6776	1074	1633	2899	-1266
West Bengal	3864	5234	-1370	***	***	***	2079	2668	-589
All India	5681	4626	1055	9667	6418	3249	2115	2770	-655

Note: All India includes small states as Goa, Delhi, Pondicherry, North Eastern States & UTs Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003

Table A9: Incidence of Indebtedness among Farmer Households by Farm
Size (Percentages) 2003

STATE	Marginal	Small	Marginal & Small	Medium & Large	Total
Andhra Pradesh	80.3	86.9	81.9	82.7	82.0
Arunanchal Pradesh	5.1	7.7	6.3	5.0	5.9
Assam	19.6	16.5	18.9	12.6	18.1
Bihar	35.7	20.8	33.9	21.4	33.0
Chattisgarh	38.6	44.9	40,6	38.6	40.2
Gujarat	43.2	57.3	47.0	67.0	51.9
Haryana	47.8	59.4	50.2	64.0	53.1
Himachal Pradesh	32.7	35.2	33.1	39.1	33.4
Jammu & Kashmir	29.4	32.5	29.8	52.6	31.8
Jharkhand	21.1	20.5	21.0	18.5	20.9
Karnataka	58.8	65.8	60.8	64.2	61.6
Kerala	63.8	72.9	64.6	59.9	64.4
Madhya Pradesh	42.6	49.9	45.4	62.0	50.8
Maharahtra	44.9	56.9	49.3	66.7	54.8
Manipur	25.6	21.4	24.9	18.7	24.8
Meghalaya	5.0	2.8	4.5	2.3	4.0
Mizoram	22.6	29.2	24.6	19.0	23.6
Nagaland	36.9	38.8	37.5	18.6	36.5
Orissa	47.6	48.4	47.7	49.1	47.8
Punjab	58.6	75.3	62.0	77.6	65.4
Rajasthan	50.4	53.1	51.2	54.9	52.4
Sikkim	32.3	28.6	31.7	40.1	32.8
Tamil Nadu	74.5	75.5	74.6	73.5	74.5
Tripura	49.8	42.2	49.5	36.4	49.2
Uttar Pradesh	39.3	42.1	39.8	46.0	40.3
Uttranchal	6.1	25.6	7.5	2.0	7.2
West Bengal	51.1	44.7	50.5	41.5	50.1
All India	45.8	50.8	46.8	57.8	48.6

Note: All India includes the small states Goa, Delhi, Pondicherry, & UTs

Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003

Table A10: Cost of Cultivation per Hectare

STATE	Marginal	Small	Marginal & Small	Medium & Large	All
Andhra Pradesh	10553	9806	10176	7527	8673
Assam	2719	2689	2705	3058	2807
Bihar	6233	5618	5999	5368	5805
Chhattisgarh	3295	2970	3112	3485	3317
Gujarat	6284	5781	6001	5968	5979
Haryana	7847	7721	7782	9386	8903
Himachal Pradesh	4793	5976	5190	7413	5655
Jammu & Kashmir	6444	4473	5740	3835	5147
Jharkhand	3620	3052	3399	2522	3180
Karnataka	6032	5845	5935	4522	5013
Kerala	9656	9467	9599	12856	10276
Madhya Pradesh	3249	3486	3396	3581	3525
Maharashtra	6665	5638	6031	3487	4107
Orissa	3759	3278	3564	3792	3628
Punjab	10867	10340	10513	12368	11991
Rajasthan	4526	4238	4368	2868	3241
Tamil Nadu	9541	7695	8806	8075	8476
Uttar Pradesh	7742	7042	7443	7330	7405
Uttaranchal	4120	4168	4129	4379	4178
West Bengal	11536	10985	11371	9492	11091
All India	6945	6046	6530	5252	5841

Note: All India includes the small states Goa, Delhi, Pondicherry, & UTs Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003

Table A11: Area under Irrigation as Per cent of NCA across Farms

STATE	Marginal	Small	Semi-Medium	Medium	Large	All
			Kharif Seasan			
Andhra Pradesh	55.5	53.6	41.4	48.0	31.7	47.8
Bihar	77.8	79.5	76.7	68.7	83.8	77.5
Chhattisgarh	30,0	29.7	23.7	31.3	40.7	28.7
Gujarat	33.0	29.7	37.1	31.7	23.1	32.1
Haryana	71.7	72.0	68.7	59.3	69.1	66.4
Jharkhand	11.5	10.0	8.6	4.8	0.1	9.6
Karnataka	24.8	27.4	28.9	21.3	22.7	25.0
Kerala	38.3	27.4	30.8	35.1	0.0	34.3
Madhya Pradesh	18.7	24.0	26.1	62.9	25.6	34.2
Maharashtra	26.7	27.7	27.6	26.4	26.0	27.0
Orissa	16.8	18.9	14.1	37.7	16.2	18.8
Punjab	101.9	103.5	96.5	95.9	124.4	101.9
Rajasthan	20.4	20.0	25.2	18.6	19.8	20.5
Tamil Nadu	71.2	72.4	80.4	75.6	59.0	74.0
Uttar Pradesh	79.6	73.9	68.8	61.0	38.9	72.7
West Bengal	54.6	68.7	61.1	50.2	**	58.8
All-India	47.5	43.8	40.4	41.1	30.5	42.0
			Rabi Season			
Andhra Pradesh	53.0	53.0	46.7	46.5	33.6	49.0
Bihar	86.3	80.8	76.5	78.6	96.6	82.7
Chhattisgarh	6.9	6.2	10.3	19.9	27.4	11.1
Gujarat	68,6	53.8	35.0	35.9	47.3	43.6
Haryana	91.7	91.1	83.5	81.9	68.3	84.2
Jharkhand	37.1	39.9	32.4	21.6	100.0	39.0
Karnataka	27.1	31.4	32.9	23.1	40.3	29.5
Kerala	35.6	43.7	49.5	62.2	0.0	41.2
Madhya Pradesh	31.6	36.0	38.7	57.1	59.0	46.6
Maharashtra	34.8	32.6	42.2	44.6	38,0	39.7
Orissa	17.2	15.6	11.2	39.1	**	17.5
Punjab	111.3	97.7	98.6	118.6	95.6	106.7
Rajasthan	41.0	46.3	51.3	47.4	21.7	40.1
Tamil Nadu	47.2	51.4	56.8	80,0	64.0	57.4
Uttar Pradesh	91.0	84.5	81.3	87.3	43.4	85.9
West Bengal	78.0	72.5	66.0	86.8		75.5
All-India	61.4	55.5	52.9	57.3	47.6	56.1

Note: All India includes the small states Goa, Delhi, Pondicherry, & UTs Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003

					V.					
Natic	Nargiral	Z	Nargiral &	Medium &	Small	Marginal	Rung	Marginal & Macham & Small Large	Mechan & Large	W
			Kluint					RafaWITO		
ArdhaPadeh	76.3	888	79.2	87.4	808	24.8	39.5	283	39.8	30.5
Anuracial Pradesh	24.7	343	29.0	6.6	225	16.0	15.9	16.0	3.9	11.9
Assum	620	683	63.5	51.5	620	53.1	63.5	555	37.3	53.2
Bihar	2.78	696	888	688	888	90.1	27.7	0.10	816	076
Chattisgarh	71.4	669	70.9	63.2	69.3	5.9	7.1	63	13.9	7.8
Gujarat	71.9	93.6	77.7	89.5	908	33.0	41.3	35.3	46.1	37.9
Hayan	40.2	74.7	47.4	74.9	53.2	47.7	898	55.8	82.7	61.5
Himachal	79.3	6.78	80.7	6'68	81.3	74.2	73.5	74.1	73.0	740
Januara Kashmir	2007	94.1	91.2	94.2	91.4	78.6	93.6	808	943	820
Jharldsand	76.8	88.1	78.6	948	79.5	32.8	42.3	34.4	47.6	35.1
Kernataka	81.1	884	83.2	92.4	85.5	25.7	37.8	29.2	48.2	33.9
Kerala	58.4	85.4	9709	71.4	61.1	47.0	74.9	49.3	585	49.7
MadayaPracksh	49.9	60.4	540	69.2	583	39.8	583	47.0	63.8	525
Milvarahtra	843	91.7	87.0	91.4	88.4	225	37.5	280	48.3	34.4
Manipur	480	49.2	482	948	48.8	15.1	19.6	15.8	39.6	161
Meghalaya	45.4	34.1	42.9	36.8	41.7	33.7	30.1	32.9	33.8	33.1
Mizoram	25.2	323	27.3	25.7	27.1	21.4	17.3	20.1	2.3	17.1
Negaland	18.8	29.5	224	56.9	24.3	142	21.3	16.6	525	186
Orissa	76.7	789	77.0	1.99	76.1	140	19.7	14.9	127	14.7
Punjab	280	888	42.2	7.56	54.1	31.2	91.5	43.2	926	549
Rajasthan	65.0	67.5	65.7	47.3	59.7	33.7	38.6	35.2	33.1	345
Sildim	28.3	37.6	29.9	39.4	31.1	8	15.3	9.6	16.9	10.6
Tamil Nadu	8.79	82.5	70.1	820	71.7	26.5	37.2	282	42.5	30.1
Tripura	79.3	97.3	80.2	55.4	7.6.2	582	59.2	582	72.9	585
Uttar Badesh	76.6	840	77.8	80.4	78.0	85.9	94.1	87.2	95.5	0880
Utranchal	50.4	0.79	515	885	53.5	49.1	63.7	502	73.7	51.4
West Bengal	880	2967	888	91.3	688	6'69	85.4	71.3	78.9	71.6
All India	73.9	81.7	75.4	77.4	75.7	53.4	8'95	54.1	549	542

Table A13: Percentage of Households reporting use of Organic Manure of the total Farmer Households 31.8 82.3 864 346 588 27.8 25.0 260 920 28.0 53.7 342 27.2 320 29.7 9.79 39.3 22.2 25.2 33.5 83.7 27.1 42.7 37.5 35 9.5 1 8,6 Marginal & Mechann & 104.4 102.7 35.6 49.5 0.68 97.4 64.8 30.9 47.9 67.0 25.7 43.8 49.9 70.6 93.7 35.7 640 35.0 # 43.3 47.3 6.7 24.1 1.9 5.8 Smill 81.9 24.9 97.6 245 546 425 36.9 245 27.0 78.1 67.7 37.3 252 300 82.6 25.3 25.3 920 120 34.1 2.7 181 8.6 Small 29.0 43.6 86.4 888 39.0 320 69/ 365 240 322 30.9 143 988 11.3 9.89 28.6 95.4 33.7 65.3 086 899 7 33.1 3.6 Marginal Large 300 699 980 32.8 22.8 22.7 76.2 22.0 37.8 14.6 23.9 29.7 10.1 9.62 15.7 23.7 24.6 52.5 91.5 41.1 36.1 9.6 S. S. 80.7 97.8 69.2 520 71.3 35.2 79.0 40,4 9.59 29.2 34.9 25.2 78.9 35.5 97.2 47.9 53.5 56.0 64.4 57.1 321 65.1 12 Marginal & Medium & 98/ 825 55.9 928 928 725 55.9 98.4 63,3 53.4 45.3 #3 18 73.4 67.2 42.7 72.4 31.3 44 28.1 56.7 69.7 32.7 97.1 643 9 689 694 625 326 79.3 6.59 25.7 9.69 46.4 54.1 80.4 39.3 29.1 54 721 Smul 83.0 33.6 588 63.2 9.69 30.9 587 640 380 58.4 49.4 82.6 36.0 70.0 38.5 40.5 60.7 787 62.6 77.1 Merginal 79.9 998 20.9 699 17.4 55.3 996 525 83 74.6 414 30.4 40 63.1 52.1 58.1 523 Annachal Pracesh MichyaPradesh ammu Kashmir AndhraPradesh Uttar Pradesh Miharahtra Earnil Nachu West Bengal Meghalaya Charisgarh Karrataka Utranchal Himsehal Parkhard Rajasthan Mizoram Nagaland All India Huyana Maripur Tripura Kerala Assum

Table A14: Percentage of Households reporting use of Improved Seeds of the total Farmer Households

STATE	Marginal & Small	Medium & Large	All	Marginal & Small	Medium & Large	All
		Kharit			Rabi	
Andhra Pradesh	66.6	71.7	67.6	28.0	38.1	29.9
Arunanchal Pradesh	9.6	13.3	10.9	6.7	21.3	11.6
Assam	33.8	30.6	33.4	34.6	32.0	34.2
Bihar	33.2	44.6	34.0	42.1	48.5	42.6
Chattisgarh	10.2	16.9	11.6	0.7	3.0	1.1
Gujarat	54,8	83.1	61.7	25.6	38.0	28.6
Haryana	39.8	73.8	47.0	44.3	75.7	51.0
Himachal Pradesh	54.0	62.6	54.5	52.4	60.1	52.9
Jammu & Kashmir	40.8	36.2	40.4	38.9	61.3	40.9
Jharkhand	21.9	20.0	21.8	5.4	4.6	5.3
Karnataka	61.7	72.1	64.3	18.8	34.0	22.6
Kerala	15.7	22.2	16.0	12.6	23.1	13.1
Madhya Pradesh	27.0	32.8	28.9	18.9	25.7	21.1
Maharahtra	62.9	85.0	69.9	25.3	46.6	32.1
Manipur	42.3	44.2	42.4	19.4	24.1	19.4
Meghalaya	3.6	0.1	2.9	3.9	2.7	3.7
Mizoram	3.2	0.3	2.7	0.0	0.0	0.0
Nagaland	21.8	36.0	22.6	21.7	25.5	21.9
Orissa	19.1	19.4	19.1	9.5	8.6	9.5
Punjab	32.6	85.7	44.4	33.8	87.9	45.9
Rajasthan	51.7	57.5	53.6	27.3	30.0	28.2
Sikkim	9.5	13.9	10.0	0.9	0.4	0.8
Tamil Nadu	54.0	72.2	56.5	23.4	41.3	25.9
Tripura	44.7	40.7	44.6	38.8	44.7	38.9
Uttar Pradesh	46.9	54.4	47.5	52.3	60.1	53.0
Uttranchal	16.6	54.0	18.6	16.6	59.3	18,9
West Bengal	62.5	69.5	62.8	58.2	61.5	58.3
All India	43.9	58.7	46.3	33.4	39.4	34.3

42.8 21.7 32.9 26.8 22.5 25.8 10.3 52.0 19.3 25.9 52.6 30.8 29.7 48.2 45.6 25.2 16.5 21.3 22.7 16.7 35.4 15.7 65.2 5.0 93 1.7 2 0.1 Table A15: Percentage of Households reporting use of Pesticide of the total Farmer Households Medium &Lurge 8'09 36.4 63.6 898 22.6 13.0 11.7 94.4 22.9 34.3 40.2 39.7 32.9 24.7 12.9 40.7 38.2 73.7 35.3 6.7 9.1 23.1 00 1.6 47.2 Marginal & Smill 29.9 28.6 20.7 33.8 17.8 17.8 24.9 248 39.9 971 240 522 648 49.3 4.4 37.2 262 130 101 342 43 3.9 191 9.3 0.1 1.7 Smill 59.6 28.6 62.2 29.2 40.5 23.7 29.2 57.8 240 17.5 120 21.2 31.4 343 57.2 45.6 681 6.62 34.8 61.1 22.1 16.1 46 8 6.6 27 Marginal 51.9 25.9 21.6 29.4 42.2 3.6 189 30.7 19,0 32.7 14.7 13.3 23.3 13.9 10.4 10.2 15.7 22.1 32.1 13.9 63.3 287 88 0.1 13 646 46.4 70.9 50.8 37.9 48.4 35.9 28.7 39.6 420 340 51.7 17.8 38.7 380 9.62 40.3 45.7 55.2 283 55.4 41.1 67.1 36.1 39.1 7 3.4 3.6 Medium & Large 63.8 943 46.6 73.4 43.5 56.7 563 55.7 22.2 73.6 83.8 45.8 57.3 57.7 29.4 39.3 50.1 63.2 48.3 11 71.1 38.1 56.1 82.1 03 24 Marginal & Smill 35.6 524 35.2 229 47.8 39.3 32.7 40.3 39.5 15.6 63.2 67.2 37.8 79.4 45 683 39.1 4.0 45.1 3.8 Small 53.4 57.4 628 73.4 27.8 44.8 45.9 40.6 446 95.3 75.0 529 38.2 522 40.7 47.0 623 184 89.3 92.1 623 23 5.5 Mergiral 37.2 345 340 242 25.2 39.5 43.9 19.8 39.5 41.0 37.4 28.7 39.5 25.6 14.4 61.0 35.6 643 483 31.7 342 782 23 66.1 47 3.4 Annachal Pracesh Madnya Pracksh ammu Kashmir Ardhra Pradesh Tamil Nachu Utrar Pradesh Maharahtra West Bengal Chattisguth Meghalaya Braddand Uttranchal Karrataka Hmachal Rejasthan Maripur Mizoram Nagalard All India Hayara Sildom Tripura Chiara Kerala Purjab Orissa Assum

Table A16: Percentage of Households reporting use of Veterinary Services of the total Farmer Households

STATE	Marginal & Small	Medium & Large	All	Marginal & Small	Medium & Large	All
		Kharit			Rabi	
Andhra Pradesh	37.4	56.4	41.1	27.5	38.8	29.7
Arunachal Pradesh	22.6	4.9	16.6	17.7	4.8	13.3
Assam	21.6	23.4	21.8	13.8	17.5	14.3
Bihar	18.8	25.2	19.3	17.5	23.5	17.9
Chattisgarh	17.6	28.1	19.8	1.1	4.7	1.9
Gujarat	43.2	51.6	45,3	28.1	29.9	28.5
Haryana	42.2	39	41.5	35.6	44.4	37.4
Himachal Pradesh	42.1	51.3	42.7	33.4	49.9	34.4
Jammu & Kashmir	43.8	40.2	43.5	40.5	62.6	42.5
Jharkhand	9.2	11.7	9.3	0.6	0.9	0.6
Karnataka	35	48.3	38.3	17.3	29.1	20.2
Kerala	23.7	34.8	24.2	17.1	38.4	18
Madhya Pradesh	15	26.7	18.8	10.1	22.2	14
Maharahtra	35.8	51.8	40.9	23.2	37	27.6
Manipur	5.7	33.5	6.1	2.8	27	3.1
Meghalaya	10.2	18.1	11.7	5.5	10.9	6.6
Mizoram	7.5	5.6	7.2	4.1	0.3	3.5
Nagaland	30,3	60.5	32.1	29.8	50	31
Orissa	30.1	36.8	30.7	8	12	8.3
Punjab	60.7	82.7	65.6	66.1	86.6	70.6
Rajasthan	21	22.9	21.6	9.1	14.4	10.8
Sikkim	17.7	10.9	16.8	7.5	11.3	8
Tamil Nadu	43.4	53.9	44.8	43.2	51.9	44.4
Tripura	33.3	34.2	33.3	24.9	20.6	24.8
Uttar Pradesh	24.4	38.1	25.7	20.1	31.4	21.1
Uttranchal	41.3	69.4	42.8	25.8	38.9	26.5
West Bengal	31.7	33.9	31.8	28.9	30.9	28.9
All India	28.5	39.9	30.3	20.8	29.6	22.3

Table 17: Access to Extension Service Workers as a Source of Information on Modern Technology for Farming by Size of Holdings (Percentage of Farmer Households) 2003

STATE	Marginal	Small	Marginal & Small	Medium & Large	Total
Andhra Pradesh	7.4	12.2	8.6	10.7	9.0
Arunachal Pradesh	10.4	15.7	12.8	4.9	10.1
Assam	5.4	8.0	6.0	5.5	5.9
Bihar	0.4	0.6	0.4	0.3	0.4
Chattisgarh	12.1	15.1	13.0	25.2	15.5
Gujarat	16.9	29.1	20.2	27.4	21.9
Haryana	0.6	7.0	1.9	4.8	2.5
Himachal Pradesh	1.5	4.2	2.0	4.0	2.1
Jammu & Kashmir	2.1	4.4	2.5	8.9	3.0
Jharkhand	0.1	0.0	0.0	0.0	0.0
Karnataka	8.0	12.9	9.4	18.1	11.5
Kerala	3.4	6.0	3.6	6.8	3.8
Madhya Pradesh	7.0	11.6	8.8	9.4	9.0
Maharahtra	5.4	8.0	6.4	10.2	7.6
Manipur	1.2	0,5	1.1	2.6	1.1
Meghalaya	1.3	1.7	1.4	14.4	3.9
Mizoram	1.9	0.0	1.3	0.0	1.1
Nagaland	0.0	0.0	0.0	0.0	0.0
Orissa	5.0	8.6	5.5	14.2	6.3
Punjab	0,4	1.4	0.6	3.9	1.4
Rajasthan	1.0	1.4	1.1	2.1	1.4
Sikkim	41.2	52.8	43.2	39.8	42.7
Tamil Nadu	12.2	15.1	12.6	17.8	13.3
Tripura	1.4	7.8	1.8	0.4	1.7
Uttar Pradesh	0.8	1.2	0.9	3.1	1.1
Uttranchal	0.4	0.0	0.3	16.3	1.2
West Bengal	3.6	5.7	3.7	11.7	4.1
All India	4.1	8.1	4.9	10.1	5.7

Table A18: Percentage of Farmers with Knowledge of Modern Farming Practices Through Training

Programmes, KVKs and Gov	mes, KV	KS and boy		The same of the sa		The second second second		for many many from word for the second for the seco	
STATE	Participation	Participation in Training Programme	amme	Krisi	Krishi Vigyan Kendra		Govern	Government Demonstration	ion
	Ingital &	Nacion &	Total	Mingral &	Madium &	Total	Marginal &	Medium &	
ArdhraPradesh	50	3.5	11	00	11	0.2	ŧ.	9,5	5.3
Anusachal Pracksh	11.7	1.9	83	9.5	17	6.7	13.1	22	9.4
Assam	1.0	26	173	970	0.7	970	40	5.6	42
Biber	00	0.2	000	0.1	000	0.1	0.3	25	0.5
Chattiggeth	0.5	1.9	80	0.4	20	8.0	1.5	1.0	1.4
Osjarat	0.3	0.4	0.3	0.7	23	11	3.1	3.5	3.2
Hayan	0.1	0.3	0.1	0.5	23	60	0.4	20	0.8
Himachal Pradesh	3.2	12.6	3.8	3.4	8.9	3.6	1.4	3.6	1.6
Janeau & Kashmir	0.7	0.2	970	000	00	00	1.6	0.3	1.5
Jhudhard	0.2	0.5	0.3	0.1	0.2	0.1	20	000	1.9
Karratalea	17	3.0	15	970	2.4	11	20	3.0	23
Kerala	26	6.1	28	83	10.5	8.4	2.8	0'9	3.0
MadnyaPradesh	0.1	600	0.3	0.5	0.3	0.5	2.7	43	3.2
Mahamhtra	0.5	1.6	8.0	0.1	1.4	0.5	22	3.6	27
Maripur	1.5	000	1.5	000	0.0	0.0	24	129	2.6
Meghalaya	0.4	670	0.5	000	000	00	43	0.0	3.5
Mazeram	0.5	26	670	13	0.0	11	0.5	0.0	0.4
Nagatand	970	000	970	000	000	0.0	5.4	00	5.1
Oriesa	970	1.5	970	0.1	00	0.1	670	3.4	7
Purjab	0.3	2.9	670	0.1	3.2	8.0	0.2	3.4	60
Rajasthan	0.2	1.0	0.4	0.7	0.8	0.7	0.7	60	0.7
Sikkim	0.4	1.9	970	000	0.0	00	3.7	19	40
Tamil Nach	3.8	6.1	4.1	0.1	000	0.1	24	101	3.5
Nippail Info irelates the small stig. Con, Delhi, 600 ubdomy,	stife Con	Delhi, @oxfscherry	8,178	0.1	0.0	0.1	3.9	0.4	3.8
Scharf Frederic Luise NS unit fort data 59th Royal on Sta	10 th dans	9th Regardon Sm	970	nert Sexy of Farm	men 2003	0.5	0.7	1.8	0.8
Uttranchal	1.5	181	2.4	000	0.0	00	0.5	16.3	1.3
West Bengal	1.0	20	1.0	0.3	0.1	0.3	1.9	0.8	1.9

Table A19: Access to Any Government Agency as a Source of Information on Modern Technology by Size of Holdings [Percentage Farmer Households] 2003

STATE	Marginal	Small	Marginal & Small	Medium & Large	Total
Andhra Pradesh	10.7	10.9	10.8	14.0	11.4
Arunanchal Pradesh	14.0	16.3	15.0	4.0	11.3
Assam	4.3	6.0	4.7	9.6	5.3
Bihar	1.2	2.6	1.4	4.1	1.5
Chattisgarh	4.9	8.1	5.9	9.7	6.7
Gujarat	12.3	15.8	13.2	17.1	14.2
Haryana	5.5	7.9	6.0	15.1	8.0
Himachal Pradesh	10.9	29.1	13.9	29.2	14.8
ammu & Kashmir	2.5	0.9	2.3	1.6	2.2
harkhand	2.6	4.8	2.9	2.4	2.9
Karnataka	11.6	13.2	12.1	16.1	13.1
Kerala	16.6	32.7	17.9	27.2	18.3
Madhya Pradesh	7.6	10.1	8.6	16.3	11.1
Maharahtra	6.0	7.4	6.5	14.4	9.0
Manipur	3.7	5.3	3.9	12.9	4.1
Meghalaya	4,4	9.7	5.6	3.5	5.2
Mizoram	2.8	1.1	2.3	2.6	2.3
Nagaland	5.1	6.2	5.4	0.0	5.1
Orissa	3.9	3.1	3.8	6.2	4.0
Punjab	4.6	11.2	5.9	17.0	8.4
Rajasthan	2.4	5.6	3.3	4.5	3.7
Sikkim	5.4	12.7	6.6	8.0	6.8
Famil Nadu	11.4	15.3	12.0	26.8	14.0
l'ripura	7.1	19.0	7.6	2.5	7.5
Uttar Pradesh	2.5	7.5	3.3	8.1	3.8
Uttranchal	0.9	9.3	1.5	19.6	2.5
West Bengal	4.4	6.5	4.6	8.0	4.7
All India	5.4	8.9	6.1	12.5	7.2

Table A20: Membership of Cooperative Society by Size of Holdings (Percentage Farmer Households) 2003

STATE	Marginal	Small	Marginal & Small	Medium & Large	Total
Andhra Pradesh	25.2	39.7	28.6	42.0	31.1
Arunanchal Pradesh	21.6	12.0	17.3	22.1	18.9
Assam	17.1	14.4	16.5	22.1	17.2
Bihar	6.6	6.9	6.7	11.0	7.0
Chattisgarh	48.0	55.5	50.4	48.3	49.9
Gujarat	38.2	57.3	43.4	66.1	48.9
Haryana	29.8	50.7	34.2	48.8	37.3
Himachal Pradesh	54.7	60.7	55.7	79.2	57.1
Jammu & Kashmir	28.3	14.2	26.2	12.0	24.9
Jharkhand	2.1	3.9	2.4	3.9	2.4
Karnataka	27.3	41.2	31.3	49.6	35.8
Kerala	58.0	73.1	59.2	65.6	59.5
Madhya Pradesh	28.3	49.9	36.7	55.6	42.8
Maharahtra	43.2	59.5	49.1	64.6	54.0
Manipur	6.4	8.3	6.7	0.0	6.6
Meghalaya	16.8	22.1	18.0	19.8	18.4
Mizoram	23.9	14.0	20.9	11.0	19.3
Nagaland	2.7	5.4	3.6	33.9	5.4
Orissa	20.6	24.3	21.1	29.2	21.8
Punjab	23.6	56.8	30.2	69.3	38.9
Rajasthan	15.5	19.6	16.7	30.9	21.3
Sikkim	39.1	52.9	41.4	45.4	42.0
Tamil Nadu	36.4	51.6	38.7	66.0	42.4
Tripura	33.3	31.8	33,3	10.9	32.8
Uttar Pradesh	15.0	34.4	18.1	40.3	20.1
Uttranchal	3.8	10.4	4.3	3.9	4.2
West Bengal	19.6	30.9	20.6	23.9	20.8
All India	22.6	38.8	25.9	47.1	29.3

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	600	0.0 0.9	42	16.1	5.1	9'0	4.9
West Bengal 4.0 3.7 4.0	40	3.7 4.0	1.9	20	1.9	1.3	1.9

Table A22: Membership of Farmers Organisation

State	% of Farmer House	seholds report	ing membership of	Membership Index	Membership Rank
	Registered Farmers Organisation	SHG	Cooperative Society	1,000,000	
Andhra Pradesh	2.4	17.7	31.4	17.2	6
Bihar	0.3	0.8	8.0	3.0	15
Chhattisgarh	2.4	6.5	49,9	19.6	4
Gujarat	5.9	3.2	49.3	19.5	5
Haryana	0.0	1.0	39.5	13.5	10
Jharkhand	0.2	2.8	2.7	1.9	16
Karnataka	5.2	8.1	35.8	16.4	7
Kerala	10.5	19.9	59.7	30.0	1
Madhya Pradesh	0.8	2.7	42.9	15.5	9
Maharashtra	2.2	4.9	54.1	20,4	2
Orissa	0,2	2.8	22.0	8.3	12
Punjab	0.3	1.5	45.3	15.7	8
Rajasthan	0.4	0.6	21.4	7.5	14
Tamil Nadu	3.4	12.9	43,7	20.0	3
Uttar Pradesh	1.0	1.5	21.5	8.0	13
West Bengal	4.0	1.9	22.1	9.3	11
All-India	2.2	4.8	30.1	12.4	

Note: All India includes small states Goa, Delhi, Pondicherry, North Eastern States & UTs Source: Computed using NSS unit level data 59th Round on Situation Assessment Survey of Farmers 2003

Table A23: Preference of Farming as Occupation by Size of Holdings (Percentage of Farmers) 2003

STATE	Marginal	Small	Marginal & Small	Medium & Large	Total
Andhra Pradesh	28.3	19.5	26.2	15.9	24.2
Arunanchal Pradesh	25.1	16.5	21.2	32.5	25.0
Assam	43.6	32.2	41.0	40.6	40.9
Bihar	51.7	43.9	50.8	47.4	50.5
Chattisgarh	51.4	46.9	50.0	32.2	46.3
Gujarat	43.5	24.0	38.2	16.5	32.9
Haryana	40.6	41.2	40.7	29.2	38.3
Himachal Pradesh	38.6	23.3	36.0	20.5	35.1
Jammu & Kashmir	41.7	32.4	40.3	19.3	38.5
Jharkhand	49.4	40,4	47.9	30.3	47.0
Karnataka	48,3	42.5	46.7	33.0	43.3
Kerala	34.7	18.5	33.3	25.6	33.0
Madhya Pradesh	46.9	39.6	44.1	32.4	40.3
Maharahtra	47.1	38.9	44.1	29.0	39.3
Manipur	31.0	40.9	32.5	20.4	32.4
Meghalaya	30.9	10.7	26.4	7.1	22.6
Mizoram	49.0	44.2	47.6	54.0	48.7
Nagaland	34.1	27.1	31.7	23.4	31.3
Orissa	49.0	41.1	47.9	34.6	46.7
Punjab	47.0	24.4	42.5	17.2	36.9
Rajasthan	41.3	40.8	41.2	33.8	38.8
Sikkim	37.6	27.5	35.9	32.4	35.4
Tamil Nadu	33.2	29.1	32.6	20.8	31,0
Tripura	46.1	21.9	44.9	61.9	45.3
Uttar Pradesh	44.1	33.2	42.4	21.7	40.5
Uttranchal	55.8	48.1	55.3	15.0	53.2
West Bengal	47.4	32.6	46.1	32.0	45.5
All India	44.2	35,3	42.4	28.1	40.1

Annexures

Annexure 1

Terms of Reference of the Commission

The Government of India, constituted the National Commission for Enterprises in the Unorganised Sector (NCEUS) vide Ministry of Small Scale Industries Resolution No. 5(2)/2004-ICC dated 20th September, 2004, under the Chairmanship of Professor Arjun Sengupta. The Terms of Reference of the Commission are as follows:

- Review the status of unorganized/informal sector in India including the nature of enterprises, their size, spread and scope, and magnitude of employment;
- Identify constraints faced by small enterprises with regard to freedom of carrying out the enterprise, access to raw materials, finance, skills, entrepreneurship development, infrastructure, technology and markets and suggest measures to provide institutional support and linkages to facilitate easy access to them;
- Suggest the legal and policy environment that should govern the informal/unorganized sector for growth, employment, exports and promotion;
- Examine the range of existing programmes that relate to employment generation in the informal/ unorganized sector and suggest improvement for their redesign;
- v. Identify innovative legal and financing instruments to promote the growth of the informal sector;
- Review the existing arrangements for estimating employment and unemployment in the informal sector, and examine why the rate of growth in employment has stagnated in the 1990s;
- vii. Suggest elements of an employment strategy focussing on the informal sector;
- viii. Review Indian labour laws, consistent with labour rights, and with the requirements of expanding growth of industry and services, particularly in the informal sector, and improving productivity and competitiveness; and
- Review the social security system available for labour in the informal sector, and make recommendations for expanding their coverage

Annexure - 2

Past and Present Composition of the Commission

The composition of the Commission is as follows:

Professor Arjun Sengupta

Chairman, Centre for Development and Human Rights, New Delhi

Shri V.K. Malhotra, IAS (Retd.)

Professor K. Jayashankar

Former Vice Chancellor, Kakatiya University, Warangal, Andhra Pradesh

Professor K. P. Kannan

Fellow, Centre for Development Studies, Ulloor, Thiruvananthapuram 695011, Kerala

Professor Ravi S. Srivastava

Professor, Centre for Studies in Regional Development, Jawaharlal Nehru University, New Delhi 110067

Shri B.N. Yugandhar

Member, Planning Commission, New Delhi 110001

Professor T.S. Papola

Director, Institute for Studies in Industrial Development, Vasant Kunj Institutional Area, New Delhi.110070

Shri Bibek Debroy,

Director, Rajiv Gandhi Institute for Contemporary Studies, New Delhi 110001.

Shri K.K. Jaswal, IAS (Retd.)

Chairman

[From 20.09.2004 to 01.07.2005 and from 17.11.2005 till date]

Member Secretary [From 01.03.2006 till date]

Full-time Member [From 01.12.2004 to 9.03.2006]

Full-time Member [From 01.11.2004 till date]

Full-time Member [From 01.05.2006 till date]

Part-time Member [From 05.11.2004 till date]

Part-time Member [From 06.04.2005 till date]

Part-time Member [From 27.10.2004 to 20.12.2005]

Member Secretary [From 01.11.2004 to 18.02.2006]

Annexure - 3

Composition of Technical Experts Group on Marginal and Small Farmers

1.	Dr. Arjun Sengupta, Chairman, NCEUS	1	Chairperson
2.	Prof. Ravi Srivastava, Member, NCEUS	-	Member Convener
3.	Dr. K.P. Kannan, Member, NCEUS	-	Member
4.	Shri V.K. Malhotra, Member Secretary, NCEUS		Member
5.	Prof. V.S. Vyas, Chairman, IDS, Jaipur	-	Member
6.	Dr. Surjit Singh, Director, IDS, Jaipur	140	Member
7.	Dr. Alakh Narain Sharma, Director, IHD, Delhi		Member
8.	Dr. D.N. Reddy, Former Dean and Professor, Central University, Hyderabad	-	Member
9.	Prof. Shri Ballabh, XLRI, Jamshedpur		Member
10.	Dr. Kanchan Chopra, Director, Institute of Economic Growth, Delhi	-	Member
11.	Dr. Mahendra Dev, Chairman, CACP, Krishi Bhawan, Delhi	12	Member
12.	Dr. P.K. Joshi, NCAP, Pusa, New Delhi	-	Member
13.	Secretary, Ministry of Agriculture or his Representative		Member
14.	Secretary, Department of Agriculture, Govt. of Madhya Pradesh, or his Representative.	-	Member
15.	Secretary, Department of Agriculture, Govt. of West Bengal, or his Representative		Member
16.	Secretary, Department of Agriculture, Govt. of Andhra Pradesh, or his Representative	-	Member
17.	Shri S.V. Ramana Murthy, Director, NCEUS	-	Co-ordinator

The Terms of Reference of the Group is as follows:

- 1. Identify the constraints, characteristics and specificities faced by the Marginal & Small Farmers.
- 2. To examine and suggest ways to improve the income prospects of marginal-small farmers from agriculture.
- 3. To examine and suggest ways to improve the skill base of marginal-small farmers.
- 4. To provide such farmers with income earning opportunities in the non-farm sector.
- 5. To suggest a special package for Small and Marginal Farmers Programme.

Annexure - 4

Composition of the Advisory Board

- Professor Bhalchandra Mungekar, Member, Planning Commission, Yojana Bhavan, New Delhi.
- Swami Agnivesh, President, Bonded Labour Liberation Front, 13, South Avenue, New Delhi.
- Professor Sheila Bhalla, (Formerly Professsor of Economics, Jawaharlal Nehru University, New Delhi) Institute of Human Development, Old IAMI Building (3rd Floor).
 I.P.Estate, Mahatma Gandhi Marg, New Delhi-110002.
- Professor Mahendra Dev,
 Director,
 Centre for Economic and Social Studies,
 Begumpet, Hyderabad.
- Ms. Madhu Kishwar, Editor, Manushi C-1/3 Sangam Estate, 1, Underhill Road, Civil Lines, Delhi-110054.

- Ms. Mirai Chatterjee, Self-Employed Women's Association (SEWA) Opposite Victoria Garden, Bhadra, Ahmedabad-380001.
- Shri Joginder Kumar President,
 Federation of Tiny & Small Scale Industries of
 India (FTSSI), General Metal Industries,
 B-189, Industrial Estate, Ludhiana, Punjab.
- Professor Jean Dreze,
 Delhi School of Economics, Department of Economics, Delhi University,
 Delhi-110007.
- Professor Amit Bhaduri,
 Council for Social Development,
 Lodhi Estate, New Delhi 110003.
- Shri Nachiket Mor,
 Executive Director,
 ICICI Bank Limited ICICI Tower,
 Bandra Kurla Complex,
 Mumbai.