

## **6. Price Policy and Minimum Support Prices in Changing Agricultural Economy**

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### **I. Introduction**

The technological change of mid-sixties was a step towards meeting the food crisis that threatened food security of the country during those years. At the same time, it was suggested that the technological change alone may not bring the required growth dynamism in the agricultural sector and proper institutional policy has to be developed simultaneously. Therefore, a series of institutional reforms were undertaken in order to supplement and induce growth. As a first step, land reforms were revamped in early seventies. The restructuring of agricultural administration and extension system followed as the second step in the process of the institutional change. This was accompanied by strengthening the system of agricultural education. At this crucial stage, banking sector underwent the metamorphosis through nationalisation of banks, providing a renewed thrust to the priority sector lending. Among all these, setting right the price policy was the most crucial institutional reform undertaken as a critical strategy. Over the last five decades, the Price policy has undergone different phases (Acharya, 1988, pp 36673). Its tools and methodology, including its effectiveness, came under relentless scrutiny. It is now a well-accepted fact that the context of price policy has changed substantially over the years and so also its purpose and effectiveness as a tool to influence the agricultural economy. These changed circumstances have to be recognized seriously and one must take a fresh look at the price policy and its instruments.

Initial emphasis of the Agricultural Prices Commission (APC) was on controlling the fluctuations in food grains prices in order to insulate the consumers against the price increase, procuring food grains for Public Distribution, providing price incentives to the producers and inducing the producers to adopt new technology (Kahlon and Tyagi, p 17-23). During mid-eighties, the emphasis of the price policy, however, transformed substantially due to the subsequent changes in the agricultural economy. With the initiation of liberalisation, the price policy attained a new connotation and now the policy has to keep in view the global price trends as well as trade as an important determinant of growth. These changes could bring in modifications in the objectives of price policy as well as its emphasis. Consequently, the focus of analytical issues also changed during this period.

Some of the critics have challenged the very existence of Minimum Support Price as a tool of price policy in the present context. The effectiveness of the policy in the changing

economic scenario across the States and along the lines of the objectives set forth by the Commission on Agricultural Costs and Prices need to be revisited now. This paper tries to look into the aspects of MSP as tool of price policy. We have also tried to highlight the factors responsible for the success of MSP as a tool of price policy as well as the parameters responsible for its failure. Understanding of the implementation process of the MSP policy and allied measures at State level has given insights into the understanding and documentation of the implementation bottlenecks in individual States.

The paper is based on the work I had coordinated on 'Impact of Minimum Support Prices on Agricultural Economy' across eleven states in India, undertaken for the Ministry of Agriculture, Govt of India (Deshpande, 2003). Eleven Agro-Economic Research Centres spread over different states participated in the study. I had the opportunity of designing and monitoring the process of these studies. The basic functioning and implementation of MSP policy in the 11 States, namely Andhra Pradesh (Ratnam and Rao, 2002), Bihar (Sinha, 2002), Gujarat (Patel, 2002), Haryana (Malik, 2000), Karnataka (Deshpande, 2003, 2003,b, Deshpande and Naika, 2004), Maharashtra (Shroff, 2003), Madhya Pradesh (Singh S.J, 2002 & Athavale 2002), Punjab (Singh and Vatta, 2002), Tamil Nadu (Swaminathan, 2002), Uttar Pradesh (Singh, Rajendra, 2001) and West Bengal (Ghosh, 2001), has been analysed in depth. This paper is based on the consolidated study prepared by utilising the reports from these states. The areas covered by the states broadly represent three regions: (i) commercial crop region, (ii) high growth food crop region, and (iii) coarse cereals-pulses dominated slow growth region. This mosaic of regions provided an opportunity to look into the effectiveness of MSP in differing contexts. The selected states and crops covered across the country are given in Appendix Table 1. It is to be noted that the number of crops selected by the research teams provide a medley of crop pattern existing in the country. Thus, the results clearly bring out effectiveness of Minimum Support Prices under various economic and agro-climatic conditions. Naturally, the instruments of price policy have not been uniformly effective in achieving the targeted intentions of the policy.

## **II. Debates on Price Policy**

Evolving a long-term price policy and creating an incentive structure in the agricultural sector was felt necessary in order to direct development of the crop economy (Raj Krishna, 1963 and 1967). In view of this, the Government of India appointed a committee under the Chairmanship of Late Shri L K. Jha to suggest the required steps towards organising the agricultural price policy of the country. The recommendations of the Jha Committee included policy initiatives to protect the consumers as well as the producers. It strongly recommended

market interventions for procuring food grains to meet the requirement for distribution as well as a protective price level to the farmers. Following the Jha Committee report, a series of measures were taken and eventually the Agricultural Prices Commission (APC) came into being in January 1965 (GoI, 1965, a).

Prof M. L. Dantwala headed the first APC. In its first report, submitted in August 1965, the Commission suggested the Minimum Support Price for Paddy. The report also clearly delineated the emerging price policy in India. It is stated in the preamble of the report that “The Agricultural Prices Commission was set up in January 1965 to advise Government on price policy for agricultural commodities, with a view to evolving a *balanced and integrated price structure in the perspective of the overall needs of the economy* (emphasis added) and with due regard to the interests of the producer and the consumer” (Govt. of India, APC Report, 1965,b). The focus on the ‘*overall needs*’ of the economy was made very clear from the beginning itself and that emphasis has to be kept in view. This marked the beginning of the price intervention scheme that went through for the last three and half decades.

It is necessary to remember that initial portals of price policy emerged in the context of food scarcity and price fluctuations, provoked by drought of mid-sixties, along with the Pakistan war. It was induced more by the acute food scarcity at that time. Therefore, the policy was framed keeping in view three different intentions, viz., (i) providing food grains for the Public Distribution System, (ii) ensuring reasonable (affordable to consumers) prices for food grains, and (iii) inducing adoption of the new technology. In a specific theoretical term, the Agricultural Price Policy ensured that various economic factors influence the rate of growth as well as quality of growth and provoke the most desired crop-mix along with food security. This incidentally ensured allocation of resources, capital formation and inter-sectoral terms of trade. All these together formed the initial theoretical pedestal for the price policy. This comes out clearly from the terms of reference of the Agricultural Prices Commission that included:

“(i) To provide incentive to the producer for adopting technology and for maximising production; (ii) to ensure rational utilisation of land and other production resources; (iii) to keep in view the likely effect of the price policy on the rest of the economy, particularly on the cost of living, level of wages, industrial cost structure, etc.; (iv) to recommend from time to time, in respect of different commodities, measures necessary to make the price policy effective; (v) to examine, where necessary, the prevailing methods and cost of marketing of agricultural commodities in different regions, suggest measures to reduce costs of marketing and recommend fair price margins for different stages of marketing; (vi) to keep under review the developing price situation and to make appropriate recommendations, as and when necessary, within the framework of the overall price policy; (vii) to keep under review studies relating to the price policy and arrangements for collection of information regarding agricultural prices and other related data and suggest improvements in the same; (viii) to advise on any problems relating to agricultural prices

and production that may be referred to it by Government from time to time” (Govt. of India, January 1965,b, pp. 47-48).

The specific steps through which these functions were to be operationalised included: (i) Announcement of Minimum Support Prices for major food grains; (ii) Procurement prices for purchasing surplus from the cultivators; (iii) Feeding the Public Distribution System and building proper buffer stocks for the purchasers; (iv) Zonal restrictions for movement of food grains to manage the supply and demand. Thus began the operations of the price policy through its instruments.

In the next two decades, the Agricultural Prices Commission through its reports framed and directed the price policy of the country and influenced the adoption and spread of the new technology. During this phase, four important instruments of the price policy were operational: (i) Procurement at pre-decided price as required; (ii) Compulsory levy at the pre-decided price; (iii) Providing Minimum Support Prices (MSP) to protect the producers against sudden price crash; and (iv) Public Distribution System to provide food grains at lower than the market prices as a protective distribution measure. These four instruments became the vanguards of the agricultural price policy of India. The Agricultural Prices Commission (APC) during sixties and in the first half of seventies followed the ‘cost of production approach’ to arrive at the MSP and procurement prices. It was reported that the APC kept under consideration nine important factors while fixing the MSP, levy prices and procurement prices, viz., (i) Cost of production, (ii) Risk under cultivation, (iii) Changes in the input prices, (iv) Trends in the market prices, (v) Demand and supply of the commodities, (vi) Cost of living index and general price index, (vii) Fluctuations of prices in international market, (viii) Price parity between crops, input and output across sectors, and (ix) Trends in the market prices (GoI, 1986).

In the early years, price policy supported the initiatives taken on the technological front and provided incentive to accept the new technology. Over years, it was understood that the farmers responded to price incentives more positively than in the past. Raj Krishna (1963) in his seminal paper first time emphasised the price responsiveness of Indian farmers despite the dominance of subsistence farming. Following this, a number of studies have shown the strong role of prices as an incentive in agricultural sector (a full review is available in Deshpande, 1996). Further, Acharya (1994 and 1997), one of the former Chairmen of CACP, noted that that the instruments of Minimum Support Prices, food subsidy and input subsidies have played an important role in achieving the objectives of food security and accelerated growth of economy, befitting all the sections of the society. Thus, the contribution of Agricultural Price

Policy towards sustaining the tempo created by the technological change of mid-sixties has been widely appreciated. But during the last four decades the agricultural policy connotations have of course changed significantly. Now agricultural prices play much incisive and crucial role than what was perceived during late sixties and early seventies.

Since independence several interesting issues emerged in the debate on price policy, which have been reviewed by Tyagi (1990), Krishnaji (1991) Jharwal (1999), Rao (2001), GoI (2002) and Sen and Bhatia (2004). A few important questions that were discussed in the context of price policy over and over again but remained unanswered included: (i) relationship between cost of production and prices; (ii) authenticity and quantum of managerial costs and other input costs, (iii) price parity across crops; (iv) building and maintenance of public distribution stock; (v) inefficiency in the Public Distribution System and (vi) overall ineffectiveness of price policy to serve as required by the objectives set forth.

The methodology of arriving at MSP was questioned and doubts were raised about the use of data, certain concepts and inclusion/exclusion of imputed cost of various items of farm operations. Similarly, rent of the self-owned land, premium for risk, price parity and cost towards managerial input also came for discussion among the analysts of price policy. It was during eighties, that farmers' organisations emphasised remunerative role of prices and insisted on revisiting the method of arriving at the Minimum Support Prices. In order to reconsider the then prevailing structure of the Agricultural Prices Commission and review its methodology, a Committee under the Chairmanship of Dr S R Sen was appointed in 1979. The Committee examined the methods of arriving at the cost of cultivation, and suggested necessary modifications. Sen Committee in its report gave a number of recommendations to improve the impact of price policy (GoI, 1980). Quite a few changes were introduced in the methodology and approach in accordance with the Sen Committee recommendations (GoI, 1980). Following this, the nomenclature as well as the focus of the Agricultural Prices Commission was changed. Subsequently, the Commission was named as Commission on Agricultural Costs and Prices (CACP) with changed terms of reference. A policy document was issued in 1986 under the title *Agricultural Price Policy: A Long Term Perspective* officially confirming the redefinition of the objectives of the price policy.

The next issue marked in the debate was reviewing the Terms of Trade (ToT) between agriculture and non-agricultural sectors (GoI, 1995). The Terms of Trade (ToT) debate arose from a consensus among academics and farm leaders that the ToT was going against agriculture and, at the same time, capital formation in the agricultural sector was also declining over years. Indeed, the farmers' agitations during eighties and early nineties in Punjab,

Karnataka, Tamil Nadu and Maharashtra were provoked by the unfavourable terms of trade to the agricultural sector. Sharad Joshi (an Economist with a World Organisation) and Nanjundaswamy (a Professor of Law) led the agitations. The arguments were focused on the method of computation of imputed rent, risk premium, imputed cost of family labour and the terms of trade between agriculture and industry (Nadkarni, 1987; Dhanagare, 1990).

The price parity across sectors reflected through Terms of Trade (ToT) between agriculture and non-agriculture, was first brought forth in Thamarajakshi's seminal paper on Terms of Trade (Thamarajakshi, 1968). This was followed by the work of Dhar (1968), Dantwala (1981), Kahlon & Tyagi (1980), Venkataramanan & Prahladachar (1984) and Nadkarni (1987). During mid-seventies, this debate had picked up as the Terms of Trade started showing signs of turning against the agricultural sector (see arguments of Sharad Joshi in Dhanagare, D N (1990)). This, along with the farmers' movements during that decade spanning across the country, led to a review of the price policy and also the methods of arriving at the MSP.

It appears from the debate that Terms of Trade went against agricultural sector till mid-sixties and slightly became favourable to agricultural sector for a short while in late sixties and early seventies to revert back against agriculture during late seventies and early eighties. It is only in the recent past and specifically during nineties that the Terms of Trade is turning in favour of the agricultural sector (Govt. of India, 1995). The computations of the Terms of Trade largely rest on the data from National Accounts Statistics and hence a good number of data adjustments are required. Even after these adjustments, one recent study observed that although the Terms of Trade in the recent past is slightly turning in favour of Agriculture, but it needs to be watched carefully (see Thippaiah and Deshpande, 1999).

The Terms of Trade have been fluctuating in favour of agriculture and against the agriculture alternatively. The recent data on the terms of trade, presented in Table 1 shows its fluctuations during eighties and nineties. It can be seen that, during 1990s, the ToT are improving in favour of the agricultural sector but not as expected and as required for the growth of the farm sector. One of the important reasons for such behaviour can be located in depressing trends in the relative prices between agriculture and non-agricultural goods. The prices of agricultural commodities have not been going at the pace at which prices of non-agricultural commodities are going. Therefore, the emphasis is on providing at least psychological support to the farmers through MSP.

**Table 1: Index of Terms of Trade Between Agriculture and Non Agriculture**

(Triennium ending 1971-72 = 100)

Year	Commodities Sold for			Prices Paid for commodities purchased for				Terms of Trade
	Final Consumption	Intermediate consumption	All Commodities	Final Consumption	Intermediate consumption	Capital Formation	All commodities	
1981-82	216.6	235.4	224.2	249.1	296.4	392.5	270.5	82.9
1982-83	230.8	246.7	237.2	254.5	308.2	429.1	279.9	84.7
1983-84	253	273.2	261.1	278.4	325.6	454.2	302.6	86.3
1984-85	265.3	293.9	276.8	298.1	328.8	503.2	321.8	86
1985-86	282.4	271.5	278	313.2	343.3	524.5	337.4	82.4
1986-87	299.8	320.2	308	337.3	368.6	542.5	361.2	85.3
1987-88	328.7	377	348.2	382.7	387.6	574.8	400.5	86.9
1988-89	364.3	363.6	364	402.5	390.5	652.2	422.2	86.2
1989-90	384.3	407.2	393.5	440.2	401.4	962.5	455.1	86.5
1990-91	423.3	500.3	454.3	490.9	449	741.5	505.1	90
1991-92	502.8	567.3	528.8	549.9	524.4	834.7	570.1	92.7
1992-93	536.4	544.3	539.6	593.9	606.4	899.3	623	86.6
1993-94	595.8	613.5	602.9	626.1	680.1	937.2	663.5	90.9
1994-95	641.5	723.7	674.6	693.9	759.5	1021.8	734.9	91.8
1995-96	683	776.7	720.8	762.5	791	1103.4	797.8	90.3
1996-97	771.8	784.7	777	793.2	839.3	1164	834.4	93.1
1997-98	785	844.2	808.9	834.1	920.1	1225.2	884.5	91.5
1998-99	901	876.5	891.1	890	955.4	1331.5	941	94.7
1999-2000p	967.7	829.7	912.1	903.5	1047.2	1371.5	971.4	93.9

Note: p Provisional

Source: Reports of the Commission for Agricultural Costs and Prices 2000-2001

Following these debates, the Government of India appointed another Committee under the Chairmanship of Prof. C H Hanumantha Rao to review the methodology of cost of production of crops, specifically focussing on valuation of labour, imputed costs of family labour and managerial costs. The Committee submitted its report covering these aspects and suggested that actual wages to be taken to value the labour cost and family labour should be valued at the wage rates of casual labour (Govt. of India, 1990). The Commission also recommended inclusion of 10 per cent managerial cost in the total cost of production. All these provided 'scientific attire' to the earlier process of arriving at the cost of production. Subsequently, the situation in the agricultural sector underwent substantial changes in the wake of liberalisation. Now the perspective and the overall needs of the economy have undergone a sea change. We have opened up the domestic markets for the world trade and that will exert

significant pressure on the market situations. This problem came up for discussion recently. The issue of efficacy and continuation of the operations of MSP needs careful attention in the changed economic scenario following liberalisation. This is also important due to imperfections prevailing in the agricultural markets and the renewed awareness of the farm lobby.

Presently, we are confronted with another question, which is about 'remunerative prices'. This concept has been recognized in the *Agricultural Policy* document of the Government of India. Farmer leaders are already arguing for providing such remunerative prices. The question became sharper due to reduction of subsidies on various inputs (fertilisers, water, credit and power) as well as increasing demand for consumer durable and, consequently, the changing relative prices with the non-agricultural sector. Similarly, the price wedge between goods produced in urban sector as against the farm products has given rise to the necessity of looking afresh into this issue of price intervention.

The price policy related concerns also featured prominently in the Report of the High Level Committee on Long Term Grain Policy (GoI, 2002). The Committee elaborately discussed the question of Minimum Support Prices in the changed context. They reviewed the MSP operations from the viewpoint of the effectiveness of the scheme, possible decentralisation of price support and procurement as well as some alternatives to Minimum Support Price scheme. The Committee recommended that Minimum Support Price should be continued but some of the corrections may be incorporated in its functioning which include: "(i) the CACP should be made an empowered statutory body; (ii) CACP should act directly on the basis of  $C_2$  cost of production; (iii) CACP should also indicate a system of imputing family labour cost; (iv) CACP should recommend only one price for Paddy for the country as a whole; (v) All the procurement agencies and Public Grain Management Institutions should be legally bound by the MSP Policy; (vi) Central government should under-write open purchase of grains under MSP; (vii) FCI should be the buyer of last resort. FCI should withdraw from states like Punjab and Haryana and concentrate on other states" (based on the detailed recommendations given by the Committee, GoI, 2002, pp 9-10). The Committee looked into the possibility of decentralised procurement scheme wherein it recommended that the grain procured under decentralised scheme must be treated as part of the central pool with FCI. It further stated that based on the guarantee of central purchase there should be an open ended bank credit on the lines of FCI provided to the states involving in decentralised procurement.



### III. Need for Revisiting MSP

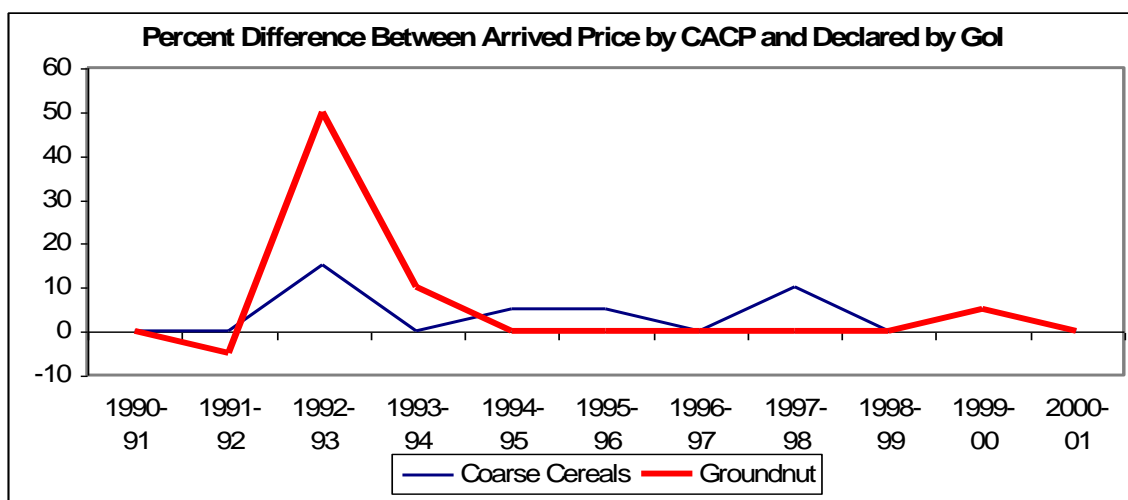
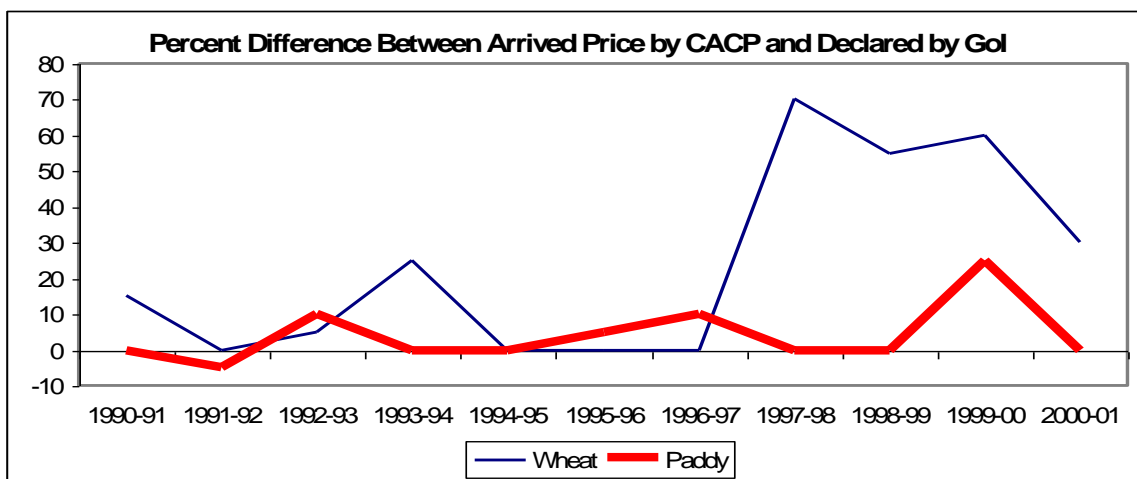
MSP is now viewed as a form of market intervention on the part of the State and also as one of the supportive measures (safety nets) to the agricultural producers. Even though it is WTO compatible (GoI, 2002), eyebrows are raised about its continuance and effectiveness to deal with the objectives set by its architects. The issues that dominated the current debate include reasons for continuation of the price support scheme, its effectiveness in terms of the objectives set forth in the 1986 document and support price vis-à-vis remunerative price approach. More pertinent problem relates to the effectiveness of the implementation of the policy of MSP. In sum, the context of price policy has changed substantially over the years and so also the direction and effectiveness of price policy as a tool to influence the agricultural economy. This provoked many social scientists to argue for a fresh look at MSP as an instrument for interacting with some of the important parameters of the agricultural economy. Initially its role was perceived more from the viewpoint of providing incentives to the farmers to adopt the new seed-water-fertilizer technology.

The initial role of MSP as an incentive to adopt technology comes out very clearly in the writing of Professor Dantwala, who was one of the founding architects of India's price policy. He stated that "Though no rigid formula has been accepted to determine the levels of floor prices, the criterion followed is that *progressive farmers should find these levels adequate to encourage enterprise and investment to augment production through the adoption of improved technology with all its risk and uncertainty* (emphasis added)" (Dantwala, 1996, p 213, originally published in 1967). After an experience of a quarter of century in the implementation of the market intervention scheme, Prof Dantwala wrote again during early nineties clearly recognising the changing role of MSP and the interventions. It will be better to quote Professor Dantawala in this context. He wrote: "Likewise, intervention has to be selective. *Its need must be clearly established and its effectiveness should be constantly under review* (emphasis added). The real problem is not simply to establish the legitimacy of intervention, but that of ensuring its effective and judicious implementation" (Dantwala, 1996, pp292, originally published in 1993). It is reported that the prices recommended by CACP are more often modified by the Government of India (Rao, V M, 2001) with the intervention of the political representatives and therefore, fixation of the prices with an elaborate structure and mechanism remained only an exercise for exhibition (See figure 1). The political interventions occurred selectively across crops depending on the crop region and the active lobby.

It has been noted by eminent academicians that the recommended MSP by CACP is revised while it is declared by the Central Government, mostly based on the extraneous

considerations. Such changes are effected quite often, rather as a rule than exceptions. The figure shows the divergences between these two over the years. Moreover, these changes in MSP are not substantiated by any rational arguments, ridiculing the so-called ‘scientific process’ of arriving at the MSP. In the process, some of the crops received better deal whereas a few other crops suffered a deliberate relative neglect. This certainly hampered the price parity across crops. It also created distortions between the trends in factor prices and product prices probably for a few selected crops and groups of farmers growing these crops. We shall revisit this issue again in the next part of the paper. That possibly makes it clear that there is a need to have a fresh look at the MSP and such review must consider its operational efficiency as the main objective.

**Figure 1: Minimum Support Prices Arrived at by CACP and Declared by Govt. of India**



#### IV. Implementation of MSP Across States

The operations under MSP in the selected states can be categorized into four distinct groups. The first group includes Punjab, Haryana and Uttar Pradesh where the Minimum Support Price has been an effective tool for creating incentives for the farmers as well as correcting price policy as desired by the policy makers. These states have been reportedly implementing the policy more effectively and procuring the major share of food grains for PDS. The second group of states includes Karnataka, Maharashtra and Gujarat. The crops that do not come under the core net of procurement have dominated this group. These states have Jowar, Bajra, Ragi and other millets as their major crops, which rarely feature under Minimum Support Price operations. However, a few of the crops are procured from these states. Therefore, largely the farmers of these states have to depend on the market operations. In the event of any price collapse, the welfare loss to the farmers in these states is relatively high. The third group consists of Andhra Pradesh and Tamil Nadu, largely featuring in the procurement of Paddy. These two southern states also have sizeable production of other crops, which do not feature under Minimum Support Price operations, and paddy dominates their procurement operations. Madhya Pradesh, Bihar and West Bengal constitute the fourth group. These states provide Paddy as well as Wheat to the procurement agencies under the Minimum Support Price scheme but the surplus generated does not get mopped due to the problems in effective implementation of MSP in these states.

**Table 2: Administration of MSP across States**

States	Details
Punjab and Haryana	Administration of MSP is best organized and these two States dominate in the procurement of wheat from the beginning of the scheme and paddy procurement in the recent past. Having got established 144 principal markets and 519 sub yards, during procurement season around 1645 purchase centres governed by the APMCs are opened. The State procurement agencies procure the produce under the direction of Government of India at the procurement price announced and the minimum quality parameters fixed. However, a regional variation in the implementation process exists on account of the fixed minimum quality parameters. The procurement of paddy varied from 73% to 95% of production in different districts in 1999-2000. Basmati variety has a much higher price than MSP and is out of the procurement system. Whereas, the procurement of wheat varied from 30% to 69% during 1999-2000. The gap between the Farm Harvest Prices (FHP) and Minimum Support Prices (MSP) is narrowing down in recent years, allowing the MSP as a market leading price and being instrumental in raising market prices preventing a fall. Five important factors that add vigour to successful implementation of MSP include: (i) sufficiently large marketable surplus of paddy and wheat; (ii) well-tuned procurement machinery with a well spread network of marketing infrastructure; (iii) process of politicization; (iv) historical contribution of surplus for the public distribution; and (v) considerable awareness of the scheme among the farmers.
Uttar Pradesh	The administration and functioning of MSP in UP has been very much defective viewed from any angles. It has been effective at procurement level but ineffective at

	<p>farmer level as the officially announced MSP provides leverage to the traders more than the farmers due to the absence of a well-developed infrastructure. In a different situation with developed procurement operations, the farmers are unwilling to offer their produce, as the prevailing market prices are higher than MSP. Still another scenario exists where the procurement agencies are well operational, while the farmers find difficulty with the objections raised by the procurement officials regarding the quality of crop. The infrastructure for MSP operation including agricultural marketing is relatively bad in almost all districts of UP. Administrative procedures for implementation in UP are quite similar to that of Punjab and Haryana, but not as well grounded due to the lack of interest on the part of the farmers.</p>
Maharashtra	<p>Predominantly a millet region of the country, the State did not take advantage of the scheme as intensively as in Punjab, Haryana and UP. Sugarcane and cotton have benefited significantly out of price policy. FCI, National Agriculture Cooperative Marketing Federation (NAFED) and Agricultural Co-operative Federation are the procurement agencies operating, but the machinery is certainly not well-g geared to procure cereals &amp; millets for reason like (i) insufficient marketable surplus of major procurement commodities of paddy and wheat; (ii) procurement of millets not being priority of the State or the Centre; (iii) MSP operating successfully for sugarcane and cotton. The availability of infrastructure such as motorable roads, creation of warehouse facilities, market intelligence etc. in the State facilitated access to MSP. The market prices are, however, much higher than MSP in the State. The price support for Soyabean has gained popularity in Maharashtra with NAFED in the procurement operations. But, the operations of NAFED are not smooth owing to delayed payments.</p>
Karnataka	<p>Administration of MSP is largely similar to that of other States. But, unlike other States, the official machinery is well aware of the problems in administration of price intervention scheme. Similarly, there is a strong pressure from the farm lobby about the methodology of arriving at MSP and its declaration. The Karnataka Food and Civil Supplies Corporation acts as an agent of FCI handles procurement, storage and distribution of food grains. Additional procurement points are opened only after the State level authorities direct for it. Recently, the Government of Karnataka has decided to establish permanent procurement centres in the APMC yards. The KFCSC makes significant profit in the procurement and distribution operations. Recently, FCI procured maize directly and incurred losses. The procurement had been largely from traders for reasons of delay in the opening of procurement centres and the traders purchasing the produce from the farmer at lower than MS. The Karnataka State Co-operative Marketing Federation (KSCMF) involves in procuring commercial crops like cotton, maize, tur and other pulses and their procurement is demand oriented and the intervention has to be pre-planned to avoid losses. The Karnataka Oilseed Growers Federation (KOF) procures oilseeds on behalf of NAFED.</p>
Andhra Pradesh	<p>The administration of MSP for paddy is implemented through FCI but operated by Andhra Pradesh Civil Supplies Corporation (APCSC). But, the programme operates through millers having food grain dealers license and are declared as purchase points. A supervisory team of 5 members supervises these traders. The APCSC notifies additional paddy purchase centres for procurement at MSP when the millers fail to purchase at pre-decided MSP. But, market prices are higher than MSP for these commodities and implementation of MSP did not attract much attention. When prices fall below MSP the State Marketing Department intervenes. Support price is provided to all the major crops grown in A.P. For all crops, except paddy and groundnuts, the Whole Sale Prices(WSP) and FHP are always higher and hence purchases under MSP are minimum.</p>
Tamil Nadu	<p>Procurement is through Tamil Nadu Civil Supplies Corporation as a sub-agent of FCI. NAFED as well as Special Commodity Boards engage in the operation. Paddy is largely procured from the Cauvery Delta and roughly only about 10% of the total production in the State is procured. Direct Procurement Centres (DPCs) operate in the</p>

	Cauvery delta. The procurement is done after testing for quality standards and moisture content. Market prices in the other regions were below the MSP and hence farmers from longer distances are forced to bring their produce to the DPCs.
Madhya Pradesh	The State Marketing Federation and M.P. State Civil Supplies Corporation are the main purchasing agents for Food Corporation of India (FCI). For these agencies, the District Central Co-operative Marketing Societies make purchases at the <i>Krishi Upaj Mandis</i> (KUMs) based on the fixed minimum quality parameters. Difficulties with the basic infrastructural facilities like inadequate and untrained staff, shortage of godowns, political interference and lack of communications between agencies, mandis and farmers regarding arrivals and prices are experienced in the procurement process under MSP both by the KUMs and farmers. MARKFED is the major purchasing agency for paddy and FCI for wheat. The administration of MSP is quite effective in M.P. and the procurement of coarse cereals and sorghum through MSP are the specialties.
Bihar	MSP is operated through Primary Agricultural Co-operative Societies (PACs) under the administrative control of State Food and Civil Supplies Department in the State. The PACs keep the stock of the commodities and sells to either FCI at MSP or to other agencies at slightly higher price. PACs are becoming stronger and the system is well geared. The indifferent attitudes of the Department and unavailability of funds to the nodal agency, viz., Bihar State Food & Civil Supplies Corporation and the implementing agencies are the main reasons, which pose many problems in procurement and also in distribution and trading of grains as well.
West Bengal	MSP policy has led support prices closer to the market prices. In fact, the support prices have influenced the market prices significantly which was facilitated by the proper transmission of price signals. FCI is in operation through the Civil Supplies Corporation of the State, but the State's share in public procurement is negligible. Only farmers with sufficient marketable surplus are protected by price support and the marketed surplus of rice was a meagre 3%-7%. Market prices rule higher than MSP, promoting healthy competition among private traders and government procuring agencies. NAFED procures surplus of commercial crops, but not very significant in comparison.

Source: Based on the correspondence with state level officials.

Administration of Minimum Support Prices has been quite an oblique task in most of the States in the country (except Punjab, Haryana, Madhya Pradesh and Uttar Pradesh). No wonder we have instances of no procurement even when market prices rule below MSP and average Farm Harvest Prices also being below the MSP in a few states. Whereas, even when FHP and WSP being higher than MSP, procurement has been taking place in some other states. The peak arrivals in regulated markets are naturally clustered during harvesting season and added to that the regulated markets function on pre-decided days in the week. These two together result in clustering of the arrivals in the market on a particular day and consequently push the producers in a disadvantaged situation. When the arrivals increase, the prices collapse as a market rule. After getting this information, a meeting of the Task Force is conducted under the Chairmanship of District Authority involving all the concerned institutions in the process of procurement. The decision for procurement is then taken and locations of the centres for procurement are decided. The whole procedure takes more than two weeks to complete,

despite the present-day communication facilities. This procedure is followed in Andhra Pradesh, Karnataka, Gujarat, Tamil Nadu and Maharashtra with slight variations. The time lapse between the price collapse and setting of the procurement mechanism creates circumstances for the farmers to sell the products to the middlemen/traders at the prices dictated by them. It is necessary to simplify the procedure and open permanent procurement centres at the APMC yards, with funds to procure at a time when prices collapse below MSP. In Punjab, Haryana, Uttar Pradesh and Bihar arrangements for procurement at MSP have been far better. The access to the procurement centres is quite easy and that resulted in higher procurement in these regions. There were quite a few instances, wherein we have noted that the MSP was lower than the WSP and FHP but still the producers of Punjab, Haryana and Uttar Pradesh preferred to sell at MSP under procurement. The Govt of Karnataka has taken a step towards simplification of this process, but the experience needs to be reviewed.

It is quite paradoxical that there are a few states in which the procurement at MSP is undertaken even when the market prices are higher than the MSP and at the same time in a few other states, despite the collapse of market prices below MSP, farmers are not able to sell their produce to the procurement agencies. There are essentially three models that exist in the grain procurement sector. First model is that of Punjab-Haryana and Uttar Pradesh, where the procurement agencies are well set and the procurement of grains is a regular activity. The distress caused to farmers here is minimum and the farmers' political lobby keeps the MSP moving up. Second model is the bureaucratic circuitous route of procurement existing in Maharashtra, Andhra Pradesh, Karnataka, Gujarat and West Bengal. In these states the time lag between the price collapse and actual procurement goes through a lot of circuitous procedures. That makes the policy totally redundant and ineffective. Third model has been developed differently where procurement is effected selectively in a few regions. Tamil Nadu, Bihar and Madhya Pradesh fall in this category. Here, the effectiveness and influence are confined by design only to a few regions, crops and groups of farmers.

It is strange that the MSP is declared by the CACP at the central level, *albeit* after having discussions with states but its implementation is totally under the state jurisdiction. This situation creates three types of problems of implementation. First, the time of declaration of MSP by CACP is rarely before the sowing season as expected in the policy. That allows the price expectation to be formed on the market trends and at times these put the farmers at a disadvantageous situation. Second, even after the declaration of the MSP, the process of procurement or market intervention is not similar across states. In some states it is well set and quick whereas in other states it is quite circuitous. Third, the process of implementation of the

policy is not same across crops and therefore some of the crops are put to disadvantageous position. In addition to this the process of politicisation across crops also has a role in creating imbalances implicitly among crops.

## **V. Effectiveness and Impact of MSP**

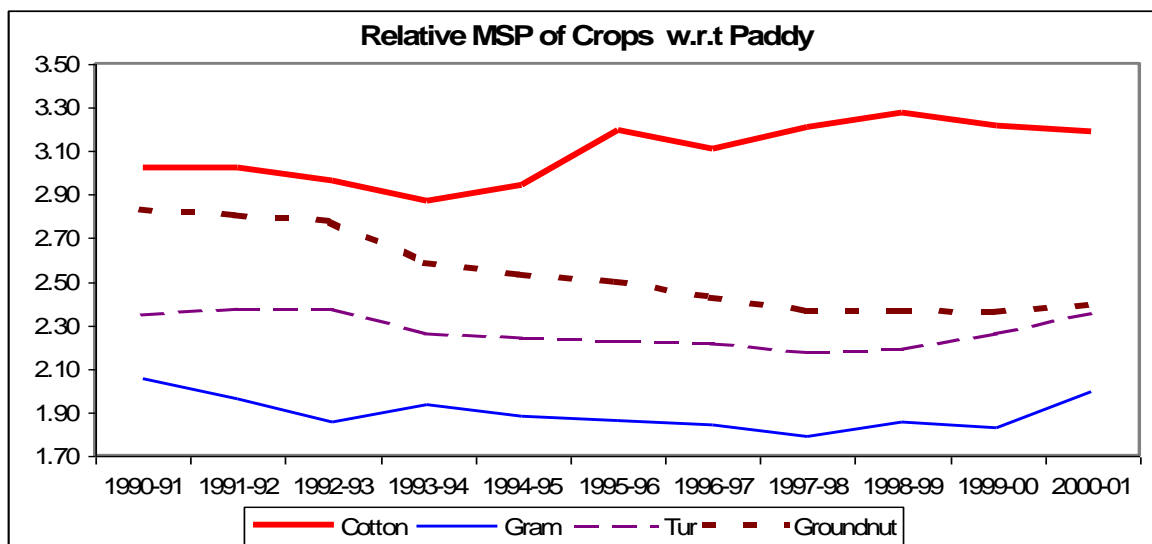
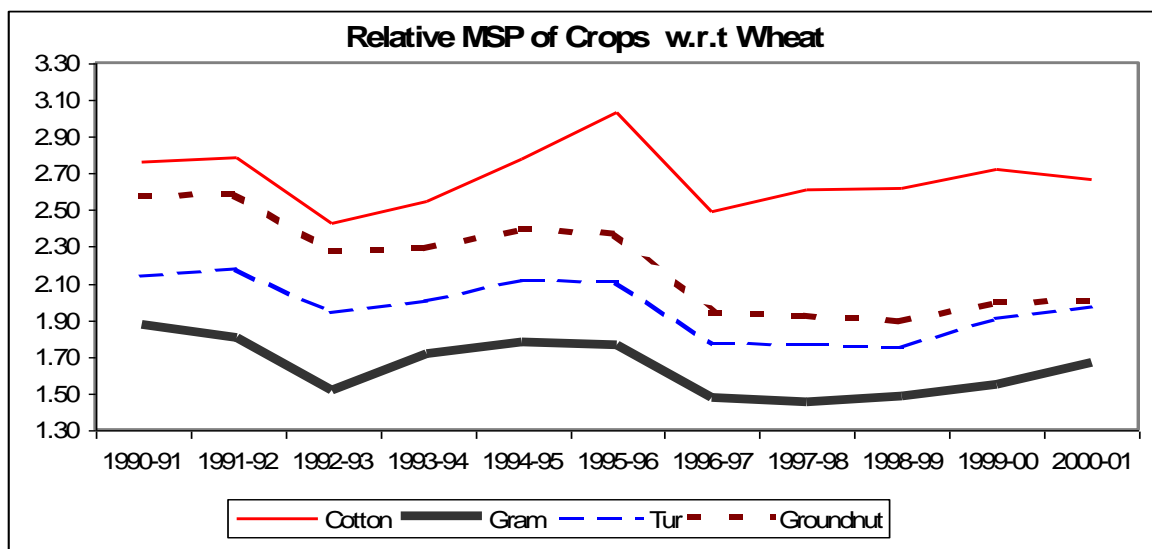
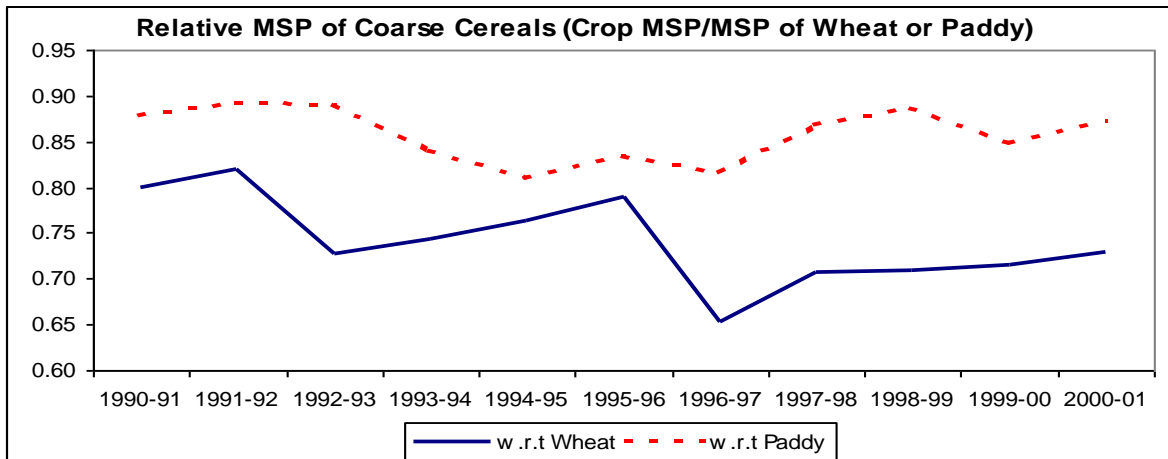
As argued earlier, the objectives of the price policy were formulated in different phases. The first phase was a typical food scarcity phase with major focus on making food grains available to the consumers. The second phase started with the recommendations of S R Sen Committee report and revisiting the methodology of computing cost of production. This was a phase of transition from subsistence economy to commercial economy. The first formal price policy declaration came in the form of the Price Policy document of 1986 that provided a long list of objectives to the Price Policy. Subsequently, the focus was divided between consumers and farmers, the latter getting into a renewed focus during eighties and nineties. Price Policy assumed political overtones and among the positive gains, position of buffer stock as well as distribution became quite satisfactory. The decade of nineties witnessed several changes moving towards commercialisation in the agricultural sector as well as in the agricultural policy. Against the background of these changes, it was felt that the primary objectives of the price policy need substantial change. It has been argued at various fora by academicians and farmer leaders that the focus of the renewed price policy should be: (i) to protect the agricultural producers from the sharp fall in prices (providing insurance); (ii) to encourage a definite cropping pattern in the context of overall growth/trade imperatives; (iii) to ensure the participation of primary producer in international market; and (iv) to provide safety-net to the farmers against the price fluctuations due to world price/market situations. Therefore, the change in the focus of price policy is quite imperative. The *Agricultural Policy* document of 2000 puts this in a similar wavelength and it categorically stated: “The Central Government will continue to discharge its responsibility to ensure *remunerative* (emphasis added) prices for agricultural produce through announcement of Minimum Support Prices Policy for major agricultural commodities” (GoI, 2000, p. 14). The concept of ‘*remunerative prices*’ has entered first time in the policy vocabulary and it has wide ranging connotation. It should be made clear emphatically that this policy will have deeper significance for the farmers and the agricultural economy at large.

Minimum Support Prices as a tool of Price Policy hitherto covered a large number of crops across the length and breadth of the country. Over years, CACP has added quite a few crops to this list without providing any strong rationale and probably not reviewing the list of the crops on the basis of effectiveness as well as operations of the scheme over years. In the

process, a good number of crops were added vitiating the inter-crop price parity and the policy became instrumental to such process of deliberate policy neglect, indirectly discouraging certain crops and crop-groups through relative prices. The cropping pattern acted as a conduit to transfer this effect of inequality across regions and farmer groups. Largely the crops that received raw deal in terms of relative prices were the crops grown by resource poor farmers and in underdeveloped regions. In order to substantiate this point, we have computed the inter-crop price parity of a few crops with wheat and paddy. The relative MSP of the crops indicate a continuously downward trend for coarse cereals and sugarcane. The relative price series in terms of Wholesale Prices do not show a similar trend as that in the relative MSP. It is quite intriguing that even though similar inputs are used in all these crops and the cost of cultivation of all the crops is increasing almost in the same pattern, the trends in relative MSP are dissimilar. Invariably the relative MSP of these crops show declining trends thereby indicating built in price disincentive in the policy, even though the cost of cultivation has similar trends. That probably brings forth the policy bias against these crops and the farmers growing them.



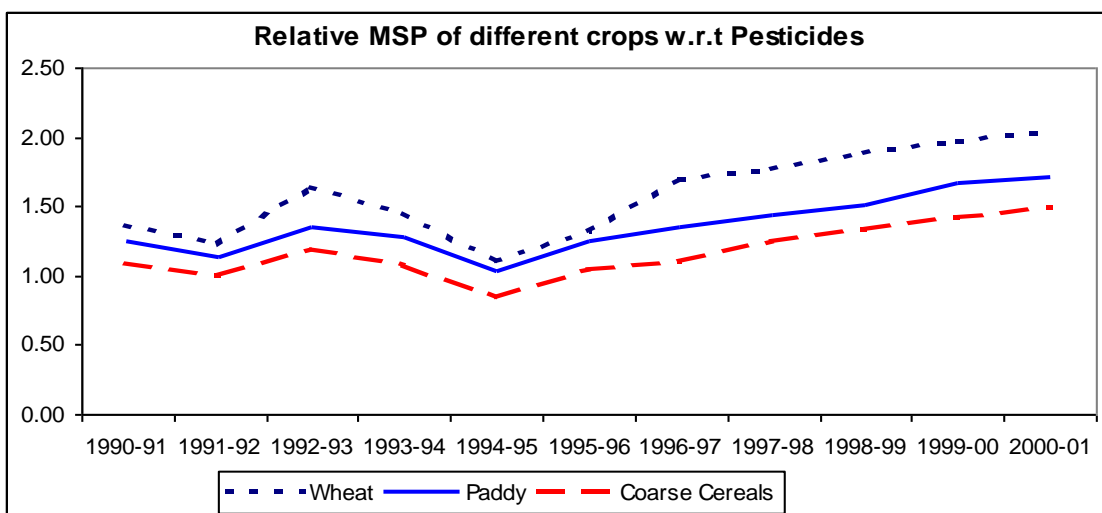
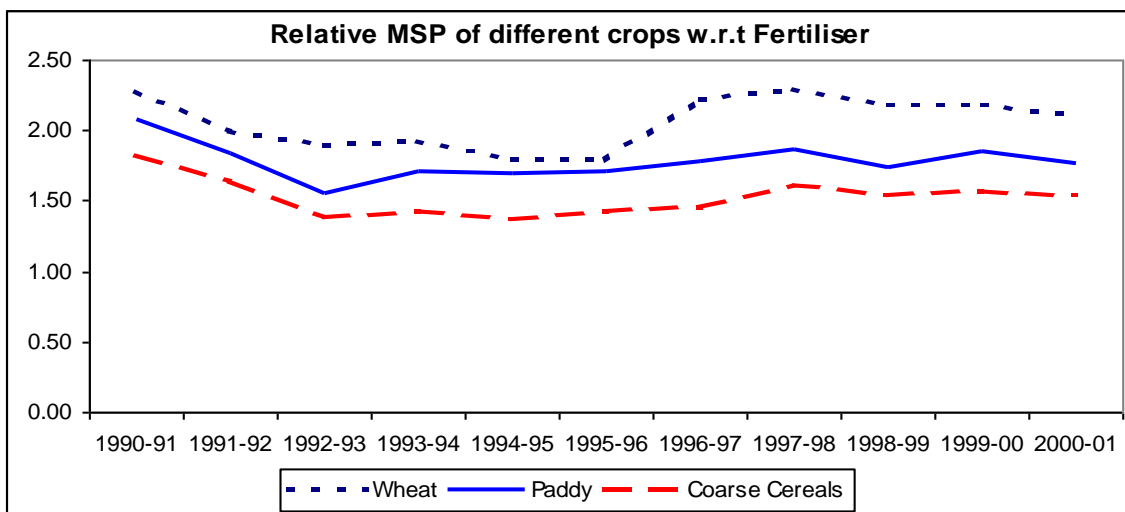
**Figure 2: Relative MSP of Crops with respect to Wheat or Paddy**



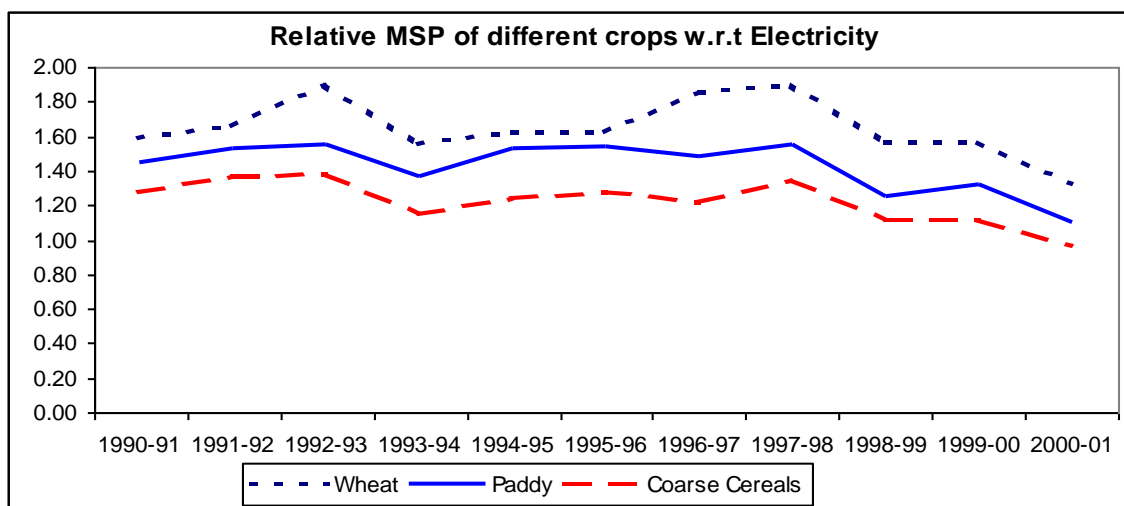
Source: See Appendix tables 2, 3 4 and 5

The price policy guidelines were provided initially during 1967 through the Government resolution establishing APC and subsequently modified under the guidelines of 1986. These clearly indicated that MSP should be declared keeping in view the trends in input prices. In order to verify the claim that MSP keeps pace with input prices, we have worked out the relative MSP with reference to fertilizers, pesticides and electricity. The trends for the last decade are presented in Figure 3. It can be seen from the figure that the claim of MSP keeping pace with input price is largely unfounded. The earlier half of this decade is marked by fluctuations in the relative prices whereas in the later half the pace between MSP and prices of pesticides seem to have gone out of trend. The relationship of MSP with the prices of electricity certainly shows fluctuations and therefore, no definite relationship.

**Figure 3: Relative MSP with respect to Input Prices (Input Prices/MSP)**



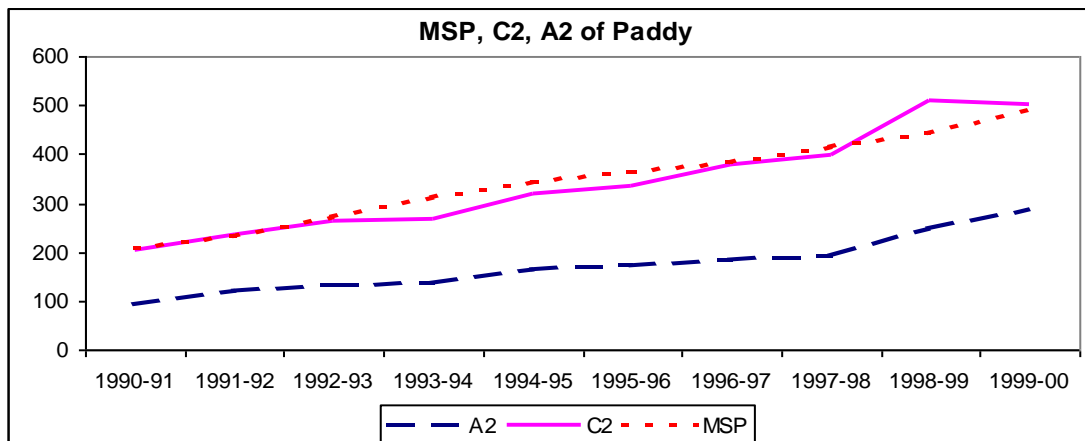
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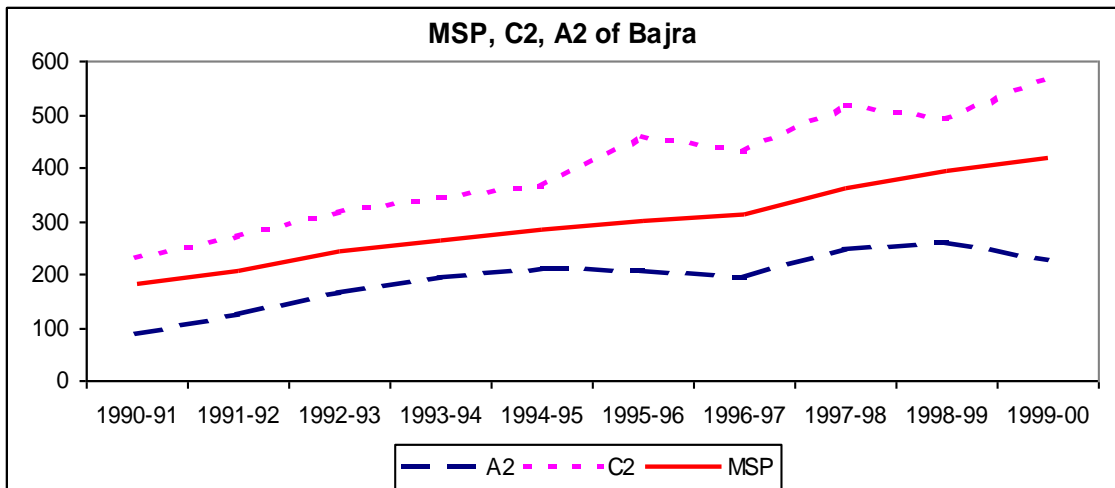
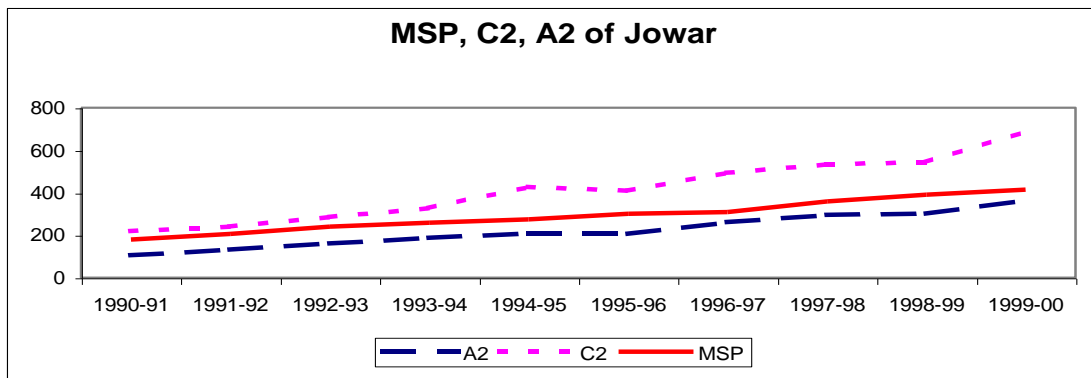
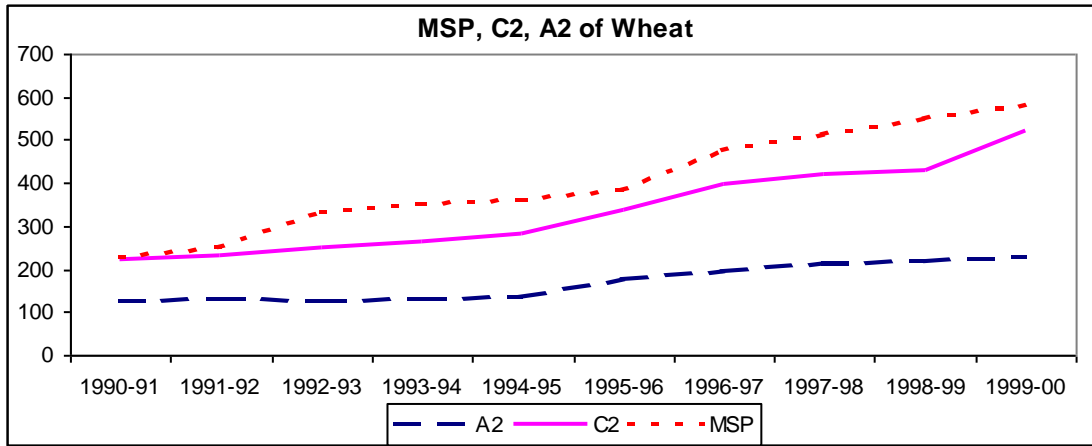


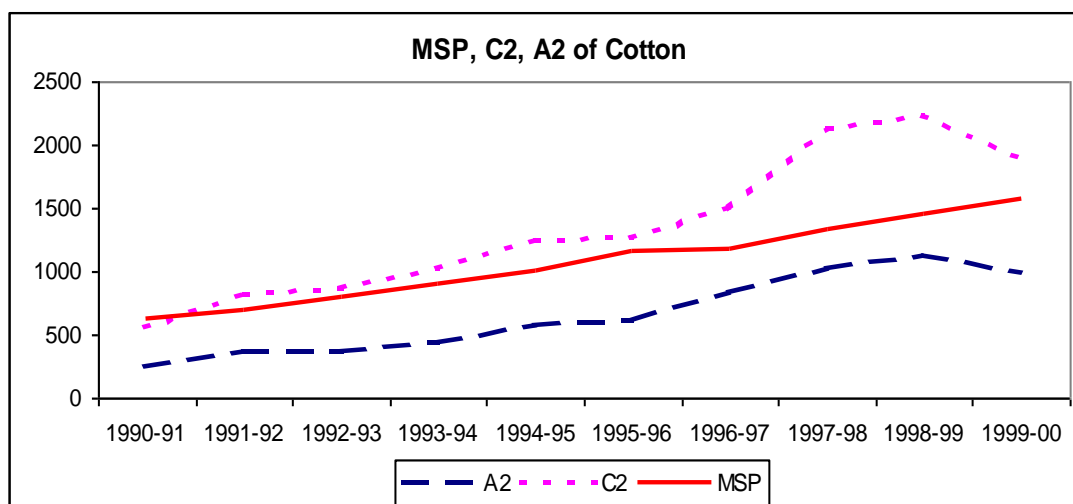
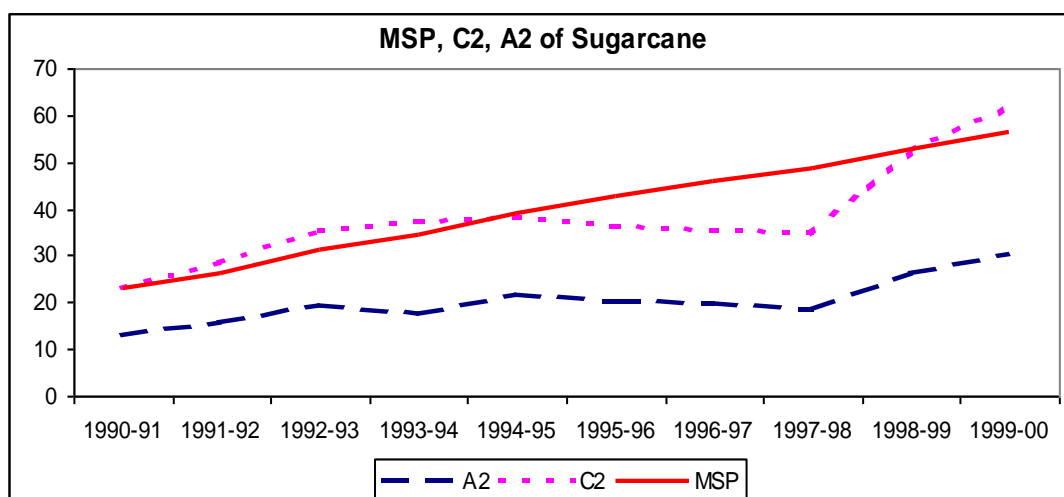
Source: See Appendix tables 2, 3 4 and 5

The process of arriving at the Minimum Support Prices has undergone several debates and reviews during the last three decades. With the help of Sen Committee and Hanumantha Rao Committee, attempts were made to make the procedure more scientific and rationale. But even then it has not been widely accepted by the farmers and a certain group of academicians. During the last two years, two workshops were conducted by CACP to thrash out the methodological problems. But we are yet to obtain a comprehensive policy statement based on these deliberations. There are hardly any attempts to check the authenticity of the data collected under cost of cultivation schemes, which is often challenged by the farmers. CACP arrives at MSP after long deliberations and based on the cost of production data collected from the countrywide centers. In order to check the relationship between Cost of Production ( $A_2$  and  $C_2$ ) and the declared MSP, we have plotted these three time series in Figure 4 for major crops. It can be seen from the figure that MSP broadly covers Cost  $C_2$  in the case of paddy, wheat, groundnut and gram. Moreover, there is a consistent trend in these series. But for jowar, bajra and ragi, MSP had been lower than the Cost  $C_2$  throughout the decade of nineties. This is also true in the case of cotton. All these facts (extracted from CACP reports) provide a clear evidence of relative neglect of jowar, bajra, ragi and cotton or little respect for inter-crop price parity.

**Figure 4: Comparison between Cost of Production and MSP Declared by Govt of India**







## VI. MSP as a Tool of Price Policy: A Cross-section View

In order to get a complete picture of effectiveness of Minimum Support Price across states included in the study, we have extracted certain parameters determining effectiveness through the reports of the study team. The effectiveness is graded into five levels starting with 'very effective' to the 'ineffective' level as these studies have utilised different ways of analysing the empirical results. Therefore, the levels here are arrived at after reading the reports completely and eliciting the required information on a common scale. Table 3 presents the picture at a glance. It can be seen that the process of implementation is carried out with two purposes in view. First, it is for the purpose of procurement and second for providing a 'cushion' to the farmers against violent price fluctuations in the market. The first objective is to mop the available marketable surplus in the food surplus regions to feed the Public Distribution

System, whereas the second objective aims at providing support against the income loss due to price collapse. We find that the procurement objective has been largely successful during nineties especially in the states of Punjab and Haryana in the first place and Uttar Pradesh, Tamil Nadu, Madhya Pradesh and Bihar at the second level. But the objective of providing cushion against the price fluctuations has not been successful in most of the states. A large number of farmers are not aware and awareness is confined mostly to 4-5 states and, even within these states, the awareness is largely confined only to the commercial crop belt. It was observed that at least 25 per cent of the farmers do not get the expected prices for their products and their expectations are not unfounded. The relationship between Wholesale Price and Farm Harvest Price on one hand, and Minimum Support Price on the other seem to be quite strong as all the three series move in the same direction over time (see Appendix table 5). There are two different views coming out of this relationship viz., (i) Minimum Support Prices keep pace with the Wholesale Prices and Farm Harvest Prices due to transmission of price signals through market. Alternatively, this can also be viewed as behaviour of Minimum Support Price to stick around the Wholesale Prices and Farm Harvest Prices; and (ii) The Wholesale Prices and Farm Harvest Prices help in deciding the trends in the Minimum Support Price in most of the states under review. The Wholesale Prices and the Farm Harvest Prices were related with Minimum Support Price. It was observed that, in the states where the MSP was below the FHP and WSP, procurement has been undertaken and largest procurement is effected only from these states. This defies the very objective of MSP as a protective policy. The MSP has been viewed as one of the important incentive factors in deciding the levels of input use (as reflected by improvement in yield level), adoption of technology and as an incentive to increase the capital formation. It was noted that except four states it does not live to this expectation. The role of MSP as an important variable in the decision-making process of the farmer also gets confined only to a few states. In sum, one can say that the Minimum Support Price has not been quite an effective policy tool during the decade of nineties, especially as a variable in the process of decision-making, as a lever to absorb the market fluctuations, as an incentive to adopt the new technology and application of new inputs, as a leading price to dictate market prices and Wholesale Prices, and finally as a cushion to the farmers to protect from the market imperfections.

The NSSO has recently collected responses from the farmers about MSP under the Situation Assessment Survey undertaken as a part of the 59<sup>th</sup> NSS round. The results are quite revealing and we find that only 30 percent of the farmers are aware of the policy and from

among these only 19 percent are aware of the procurement agencies (Table 4). This brings the policy and its implementation under pathetic view.



**Table 3: A Comparative Picture Across States of Effectiveness of MSP**

Sl No	States	Relationship Between MSP and		Impact on			Role as Decision Making Variable	Area Response	Process of Implementation		Major Crops	Per cent of Farmers who	
		WSP	FHP	Yield	Technology	Incentives			Procurement	Cushioning		Are not Aware (%)	Did not get Expected Prices (%)
1	Punjab	****	****	*****	*****	****	****	****	*****	**	Wheat, Paddy, Cotton	30 to 90	6 to 20
2	Haryana	****	****	*****	****	****	****	****	*****	***	Wheat, Paddy, Cotton	90	5 to 20
3	Uttar Pradesh	***	***	***	****	****	****	****	****	***	Wheat, Gram, Sugarcane	20 to 80	10 to 15
4	Karnataka	***	***	**	***	**	**	**	**	**	Paddy, Jowar Ragi, Tur, G.Nut	2 to 58	20 to 45
5	Maharashtra								**	**	Jowar, G.Nut, Soyabean	1 to 50	10 to 25
6	Gujarat	****	****	***	***	**	***	***	***	**	Bajra, Maize, Wheat, Cotton G.Nut	80 to 90	20 to 40
7	Andhra Pradesh	****	****	****	***	**	**	**	***	***	Paddy, Jowar G.Nut, Sugarcane	12 to 100	12 to 60
8	Tamil Nadu	****	****	***	***	****	***	***	****	***	Paddy, Sugarcane G.Nut, Pulses	36	25
9	Madhya Pradesh	***	***	****	***	***	****	***	****	***	Wheat, Jowar, Soyabean, Gram, G.Nut	40	48
10	Bihar	***	***	***	****	***	***	**	****	***	Paddy, Wheat Jute	27	40
11	West Bengal	****	***	***	***	***	**	*	***	***	Paddy, Wheat Jute, Mustard	16 to 80	60

Note: \*\*\*\*\* - Very Effective; \*\*\*\* - Effective; \*\*\* - Average; \*\* - Less Effective; \* - Ineffective

**Table 4: Farmers' Awareness of MSP and Procurement Agencies.**

Sl No	States	Percent of Farmers Aware /not Aware of MSP		Those Aware of Procurement Agency
		Aware	Not Aware	
1	Punjab	63.2	36.8	53.0
2	Haryana	66.7	33.3	43.6
3	Uttar Pradesh	33.3	66.7	21.5
4	Karnataka	29.2	70.8	23.4
5	Maharashtra	27.8	72.2	21.1
6	Gujarat	26.7	73.3	14.3
7	Andhra Pradesh	29.4	70.6	16.7
8	Tamil Nadu	49.9	50.1	39.0
9	Madhya Pradesh	29.4	70.6	19.7
10	Bihar	19.5	80.5	8.8
11	West Bengal	30.3	69.7	13.1
12	All-India	29.6	70.4	19.0

Source: NSSO (2005), Some Aspects of Farming, 59<sup>th</sup> Round, NSSO, P.A1.

## VII. Ifs and Buts of Decision Making

It is strongly argued by a few people that MSP as a price policy instrument has outlived its requirement and, therefore, should be replaced. This view comes from the ineffective implementation of the instrument. It is clearly non-contestable that implementation of MSP had been selective and so also its impact. A few states derived support out of it not only on the count of the crop pattern advantages but also with the help of political manoeuvring. Nevertheless, it does not allow us to conclude that the policy had been totally ineffective and therefore be dropped altogether. Such a conclusion will be a hurried and non-analytical one. If one tries to look into the probable effectiveness of the policy, the picture is quite encouraging. We have simulated this situation to obtain Karnataka picture so as to assess the effectiveness of the policy. Three different situations were taken for the field survey as indicated earlier. Mandya district represents a commercial economy where a large proportion of farmers are aware of MSP and are commercially oriented, whereas Gulbarga represents an under-developed region with lowest level of commercialisation. Belgaum is in between the two situations. We tried to look into the decision making process of the farmers from the view point of MSP. The respondents were explained the process of MSP and asked *'if MSP as a tool*

*of price policy is effectively administered, what will be its influence on their decision making behaviour*'. The analysis under this "IF & BUT" situation is presented below.

In any decision-making process price is expected an important factor. All Nerlovian and modified-Nerlovian studies have considered expected price but in all these studies lagged price has been taken as a proxy for expected price, probably, with the strong assumption that the earlier years' price is the best expectation of the farmer; a cold-blooded approach indeed. At the micro-level, however, one can get the expected price of the farmers and these are not certainly the last season's prices. Given the prior declaration, Minimum Support Prices provide a better alternative for expected prices. Decision-making at the farm level also involves the use of inputs, their choice, timeliness, and quantum of inputs. Among all the inputs, area allocation for the crop takes priority. MSP also hinges on the decision-making about the use of a crop variety in the production process. Similarly, it also impacts the process of cultivation represented by cultivation practices, application of inputs and marketing of the product. We have presented the results for the three different regions in Table 5 wherein the proportions of farm households linking such decisions have been presented. It should be borne in mind that the entire exercise here is a kind of simulation as most of the farmers were not aware of MSP. Our investigators explained the present MSP system to the farmers and asked their responses in case the system worked effectively. The results present a picture of mixed type; even then we got a view that MSP would matter in decision-making and especially in the decision about choice of variety and area allocation. It is necessary to clarify at this juncture the questions posed by the interviewer, especially keeping in view the respondents' unawareness of MSP operation. Therefore, these responses should be taken cautiously. Table 5 shows the per cent of farmers basing their various decisions on the increase or decrease in the MSP, provided the scheme is implemented effectively. The results of Mandya and Belgaum are bit similar, but Gulbarga depicts a different behaviour. It can be observed that use of cash inputs, adoption of new technology and wage payments to the labourers seem to get a positive influence of MSP. Gulbarga sample also shows the influence on time for marketing (chance of selling at the convenience of the producer).

We repeat that the responses about decision-making obtained here are more like a simulation exercise conducted at the village level. But even with the limitation of such an exercise, we can still say that if the MSP intervention is proper and if the farmers are made fully aware of it, the instrument will help in dealing positively with the decision environment. The exercise was also repeated in a group of farmers to understand how far they based various

**Table 5: Likely Decisions by Farmers if MSP is Implemented Properly**

(Per cent of total respondents)

<b>Decision</b>	<b>Mandya</b>	<b>Belgaum</b>	<b>Gulbarga</b>
Increase in the use of cash input due to the increase in MSP	92.00	100.00	94.00
Increase in wage rate to hired labour due to increase in MSP	94.00	90.00	92.00
Use of new technology due to increase in MSP	86.00	94.00	92.00
Increase in the market time due to increase in MSP	10.00	36.00	94.00
Change in the market place due to increase in MSP	30.00	38.00	52.00
Increase other investments due to increase in MSP	58.00	54.00	28.00

Note: The proportion of respondents who responded 'yes' to the question to total number of respondents.

decisions on expected price (given MSP as expected price and under the assumption that MSP will cover the cost of cultivation and include respectable allowance for managing the farm). The results have been presented in Table 6. We can see from the table that MSP played a vital role in the process of decision-making, given the caveats listed by the farmers. These caveats include a remunerative MSP, declaration of MSP before sowing season, administrative mechanism set in place and above all, involving minimum transaction cost.

In Tables 6, we have presented the actual decisions taken by the farmers in the real production environment. The decisions about varieties adopted, the method of cultivation and credit as well as investment decisions could be seen here. But these were not exclusively in response to the price environment and depended on a host of other factors. Largely, the contours of decisions were revealed by the actual decisions and we found that the farm households with strong resource base had a hesitation in going either for an innovative technology or method of cultivation.

### **VIII. Restructuring the Policy Scaffolding**

Minimum Support Prices have been in operation as a price support scheme for more than three decades and it is time now to look back at the effectiveness of this scheme. This will require examining if the present operations of MSP are meeting the objectives with which the scheme began. The first task here is the need for intervention to correct the market distortions and making the market more competitive. Hitherto, MSP operated selectively for a few crops and served the interests of a few states as well as groups of farmers. To be specific, only wheat,

**Table 6: Farmers' Likely Responses to the Impact of MSP on Farm Decision-Making**

<b>Decision-Making Field</b>	<b>Mandya</b>	<b>Belgaum</b>	<b>Gulbarga</b>
Area allocation decisions	AF	PA	PA
Input Application	PA	AF	AF
Fertiliser	AF	AF	PA
Pesticides	PA	RA	NI
Irrigation	NI	RA	NI
Other Cash	AF	AF	AF
Cultivation practices	PA	RA	NI
Wages paid / Use of hired labour	NI	AF	RA
Marketing (Place, Time and Price)	AF	PA	RA

Note: AF - Almost fully, PA - Partially, RA - Rarely, NI - No Impact

paddy, sugarcane (SMP), and to some extent cotton and groundnut benefited from the policy. During the early seventies and up to mid-eighties price policy concentrated on wheat and paddy, now this policy required a revisit. Quite rightfully, a Committee under Prof. Abhijit Sen was appointed to look into long-term grain policy of the country. The Committee recognised the necessity to continue with the support prices and strongly suggested to make CACP as empowered statutory body. That will help to monitor the domestic price policy and create situation conducive to the changing situations. The role of CACP has to expand from mere managing the domestic price policy to getting into trade related aspects of policy for agricultural commodities.

The implementation of MSP and its awareness among the farmers is an important bottleneck. A number of institutions are involved in the procurement process and there is hardly any coordination between them. For an effective policy, it is necessary to have a single agency coordinating the whole procedure without any time lag involved. It is suggested that FCI should handle food commodities as is done now and NAFED may be made responsible for all the other non-food commodities and international trade. Agencies like NAFED also have a significant presence in international trade but have not been geared through policy to undertake such initiatives. Therefore, it is necessary that institutions like NAFED or specially constituted Commodity Boards (like Tur Board of Karnataka) also intervene the market with the prices declared well in advance for the purpose of trade. The rest of the bureaucratic structure causing distance between procurement agencies and the farmer should be done away with.

Even beyond this, it has come out clearly that the price intervention scheme hitherto has not been effectively implemented and thus could not fully stand by the objectives it has framed to serve. The price policy has been asymmetric in terms of crops as well as regions and

thus can inflict inequality even through a well-designed intervention scheme. Such externalities inflicted by a deliberate policy bias on coarse cereals and pulses sector as well as on the regions growing these crops can be seen in their growth rates and income foregone in the process. This experience requires a selective Price Policy with a clear focus on the outcome. We suggest that the MSP should be selectively applied for crops and in the regions, based on three criteria, namely growth pattern, competitiveness and trade response. The choice of such crops and regions has to be done with rational criteria and it should be transparent in the aggregate policy framework. Recent sceptical remarks from farm leaders call for a thorough review of the methodology of arriving at MSP. Such review should be taken periodically and transparent in nature. Doubts are also raised from some quarters about the authenticity of the data collected under the Cost of Cultivation Scheme. It is necessary that sample checks of the data collected under Cost of Cultivation Scheme by independent agencies be undertaken. This process should be made mandatory for each of the States. The procurement mechanism needs some streamlining and the State governments should be encouraged to set up their own Agricultural Prices Commissions. Such Commissions will help to monitor the prices and the procedure of intervention on the similar lines as has been done in Karnataka.

Inter-crop price parity is quite conspicuous and that sends wrong signals to the resource poor farmers. This can be effectively utilised to encourage or discourage a particular cropping pattern. It appears that little attention has been paid to this aspect during nineties. Therefore, coarse cereals suffered a relative neglect at the policy threshold. Price Policy now needs to keep in view the crops having international trade potential. Two aspects have to be kept in view to encourage agricultural trade. First, to monitor and manoeuvre the Price Policy between domestic prices and international prices and second to encourage the cropping pattern in favour of the export oriented crops. It has come out very clearly that MSP policy has not reached the farmers except in the regions with predominantly commercial agriculture. This is both due to the present process of implementation and declaration of MSP. To overcome this lacuna the information of MSP should reach the farmers through effective extension agencies.

There are three alternatives considered as either supporting or replacing the Minimum Support Prices. First one is the direct payment system or an income support scheme. This is largely prevalent in the European Union. The direct payment system involves compensating the income loss to the farmers due to price or yield collapse at the pre-decided price or market price during that year. The implementation process and modalities of this scheme are quite complex in Indian context. Apart from that, as the scheme involves direct transaction of money, it will be difficult to keep control on the transaction cost and exploitation by

middlemen. Given the conditions of the present land records system, hidden tenancy, reverse tenancy and record of yields, it will be difficult to implement the scheme. Even the Committee on the Long Term Grain Policy also gave a similar opinion. The Committee notes: "It is estimated that if the government has to compensate each of farmers growing Paddy and Wheat in the country, it may end up paying more than what has already been incurred in the existing system of procurement" (GoI, 2002, page 163).

The second alternative is the income/price linked insurance scheme. These types of support schemes are under operation in many countries, especially Canada, France and US. Under the Income Support Linked Insurance Scheme, it is envisaged that the farmers participating in the scheme (especially the Paddy and Wheat growers) will be guaranteed an income calculated by multiplying the product of average yield of the preceding three years and the market prices. These will be calculated on the basis of moving averages. In the case of failure either in yield or collapse of prices, 80 per cent (or any other pre-decided share) of such gross income will be paid as indemnity to the farmers.

A = (Average Yield \* Average Market Price);

B = (Average Yield \* Minimum Support Price)

Alternative I: Here the indemnity payable will be as follows:

$$\text{Indemnity payable} = \{A - (\text{Actual yield} * \text{Prevailing Average Price in the Peak Season})\} * 0.80$$

Alternative II: Here the indemnity payable will be

$$\text{Indemnity payable} = \{B - (\text{Actual yield} * \text{Prevailing Average Price in the Peak Season})\} * 0.80$$

Even in this scheme, there are quite a few inadequacies of implementation. These inadequacies could only be visualised by the field workers who are aware of the availability of yield data at village level and the price data from the regulated markets. It must be borne in mind that a large surplus of grains is sold out of the regulated markets and, therefore, the scheme would become difficult for implementation.

The third option relates to operations of forward/future markets through establishing commodity boards for various commodities. This can be one of the important alternatives. The forward markets can undertake large purchases and sale the commodities that will allow smooth flow of the commodities in the market thereby reducing the loss due to fluctuations. This will also keep in control the prices and totally avoid violent price fluctuations. Future markets have been operating in the country and we have a Forward Market Board. The

commodity boards on the lines of Wheat Board of Canada and Tea and Coffee Boards of India that work independently and autonomously, could be quite useful in keeping the prices under control and managing domestic trade. This has been successful in India. We have the Forward Markets Act and Future Markets Regulation Act in place. If these are properly modified and utilised, possibly the situation in the price policy domain can be controlled.

Functioning of the agricultural markets and their interface with the market intervening institutions is another problematic area. Agricultural Produce Marketing Committees have infrastructure difficulties in their functioning and this provides enough room for the inefficiencies to creep in. Under the domestic market reforms, probably we have to reform the functioning of APMC on priority. It is reported that a model APMC act is being circulated among states and discussion is taking place to revise the earlier act. The probable areas that need reform are (i) Infrastructure creation as well as proper use of infrastructure, (ii) Process of grading and removing the inefficiencies in that, (iii) Process of auction and the probable nexus between the traders, (iv) Reducing the dependence of the farmers on the traders and breaking the interlocking of the credit and product market. In addition to these, the monitoring of the prices and a proper information system is required in all the APMCs. Thus reforms at APMC level should take priority over other factors.



## APPENDIX TABLES

**Appendix Table 1: Regions and Crops Selected for the Field Survey**

State/districts	Region/District	Major crops
PUNJAB	Region I	Paddy and Wheat
	Region II	Wheat
HARYANA	Kaithal	Wheat
	Sirsa	Wheat
	Bhiwani	Wheat
UTTAR PRADESH	Budaun	Wheat
	Muzafarnagar	Sugarcane
	Banda	Gram
KARNATAKA	Mandya	Paddy, Ragi and Sugarcane
	Belguam	Paddy, Groundnut and Jowar
	Gulbarga	Jowar, Gram and Tur
MAHARASHTRA	Solapur	Rabi-Jowar
	Kolahapur	Groundnut
	Akola	Kharif-Jowar
GUJARAT	Sabarkantha	Jowar, Bajra & wheat
	Junagadh	Groundnut
	Panchamahals	Tur, wheat, Bajra & jowar
ANDHRA PRADESH	W. Godavari	Paddy
	Anantapur	Groundnut and Paddy
	Mahabubnagar	Jowar, Paddy & Ragi
TAMILNADU	Dharmapuri	Paddy I, Ragi, Groundnut & Pulses
	Thanjavur	Kuruvai paddy, Samba paddy & Sugarcane
	Villapuram	Paddy I, Sugarcane & Groundnut
MADHYA PRADESH	Ujjain	Soyabean
	Narasimpur	Wheat, paddy
	Mandla	Gram
BIHAR	Rohtas	Paddy & Wheat
	Purnea	Jute
	Darbhanga	Paddy, Wheat
WEST BENGAL	24 Parganas	Paddy
	Hooghly	Paddy
	Darjeeling	Paddy

Note: Based on AERC Research Reports

**Appendix Table 2: Relative Minimum Support Prices w.r.t Wheat  
(MSP of Crops/MSP of Wheat)**

Year	Coarse Cereals	Sugarcane	Cotton	Maize	Gram	Tur	Groundnut
1990-91	0.8000	0.1022	2.7556	0.8000	1.8711	2.1333	2.5778
1991-92	0.8200	0.1040	2.7800	0.8400	1.8000	2.1800	2.5800
1992-93	0.7273	0.0939	2.4242	0.7424	1.5152	1.9394	2.2727
1993-94	0.7429	0.0986	2.5429	0.7571	1.7143	2.0000	2.2857
1994-95	0.7639	0.1086	2.7778	0.8056	1.7778	2.1111	2.3889
1995-96	0.7895	0.1118	3.0263	0.8158	1.7632	2.1053	2.3684
1996-97	0.6526	0.0966	2.4842	0.6737	1.4737	1.7684	1.9368
1997-98	0.7059	0.0950	2.6078	0.7059	1.4510	1.7647	1.9216
1998-99	0.7091	0.0958	2.6182	0.7091	1.4818	1.7455	1.8909
1999-00	0.7155	0.0967	2.7155	0.7155	1.5431	1.9052	1.9914
2000-01	0.7295	0.0975	2.6639	0.7295	1.6639	1.9672	2.0000

**Appendix Table 3: Relative Wholesale Prices w.r.t Wheat (WSP of Crops/WSP of Wheat)**

Year	Jowar	Ragi	Bajra	Maize	Sugarcane	Cotton	Groundnut	Tur
1990-91	0.8873	0.8379	0.8902	1.0860	0.8542	1.1278	1.3539	1.6502
1991-92	1.2548	0.9622	1.2253	1.2106	0.8272	1.1600	1.2317	1.5287
1992-93	0.9150	0.9264	0.8053	0.8048	0.8361	0.9300	0.9996	1.3079
1993-94	0.7762	0.7995	0.9803	0.9562	0.8946	1.2790	1.0079	1.3370
1994-95	1.1008	0.9127	1.0022	1.0700	0.8181	1.4716	1.1382	1.6208
1995-96	1.1485	1.0660	1.0785	1.0940	0.8471	1.2034	1.1525	1.9842
1996-97	1.0926	0.8510	0.9225	0.9852	0.7723	0.9307	0.9503	1.4496
1997-98	1.0108	0.8455	0.8866	0.8215	0.8305	0.9838	0.9916	1.4506
1998-99	1.1742	0.9488	1.0746	1.0942	0.9084	1.0431	1.0116	1.7142
1999-00	1.0669	0.8167	1.1289	1.0613	0.7220	0.7032	0.8067	1.3514
2000-01	0.8760	0.8233	1.0213	0.9702	0.7026	0.7428	0.7968	1.1229

**Appendix Table 4: Relative Minimum Support Prices w.r.t Paddy  
(MSP of Crops/MSP of Paddy)**

Year	Coarse Cereals	Sugarcane	Cotton	Maize	Gram	Tur	Groundnut
1990-91	0.8780	0.1122	3.0244	0.8780	2.0537	2.3415	2.8293
1991-92	0.8913	0.1130	3.0217	0.9130	1.9565	2.3696	2.8043
1992-93	0.8889	0.1148	2.9630	0.9074	1.8519	2.3704	2.7778
1993-94	0.8387	0.1113	2.8710	0.8548	1.9355	2.2581	2.5806
1994-95	0.8088	0.1150	2.9412	0.8529	1.8824	2.2353	2.5294
1995-96	0.8333	0.1181	3.1944	0.8611	1.8611	2.2222	2.5000
1996-97	0.8158	0.1208	3.1053	0.8421	1.8421	2.2105	2.4211
1997-98	0.8675	0.1167	3.2048	0.8675	1.7831	2.1687	2.3614
1998-99	0.8864	0.1198	3.2727	0.8864	1.8523	2.1818	2.3636
1999-00	0.8469	0.1145	3.2143	0.8469	1.8265	2.2551	2.3571
2000-01	0.8725	0.1167	3.1863	0.8725	1.9902	2.3529	2.3922

**Appendix Table 5: Relative Wholesale Prices w.r.t Rice (WSP of Crops/WSP of Rice)**

Year	Jowar	Ragi	Bajra	Maize	Sugarcane	Cotton	Groundnut	Tur
1990-91	0.7945	0.7503	0.7971	0.9724	0.7648	1.0099	1.2123	1.4776
1991-92	1.0566	0.8103	1.0318	1.0194	0.6966	0.9768	1.0372	1.2873
1992-93	0.8216	0.8319	0.7231	0.7227	0.7508	0.8350	0.8975	1.1744
1993-94	0.6993	0.7202	0.8830	0.8614	0.8059	1.1522	0.9079	1.2044
1994-95	0.9794	0.8121	0.8917	0.9520	0.7279	1.3093	1.0127	1.4421
1995-96	0.9491	0.8809	0.8913	0.9041	0.7001	0.9945	0.9525	1.6398
1996-97	0.9992	0.7782	0.8436	0.9009	0.7063	0.8511	0.8690	1.3256
1997-98	0.8927	0.7467	0.7830	0.7255	0.7335	0.8689	0.8758	1.2812
1998-99	0.9656	0.7802	0.8837	0.8998	0.7470	0.8578	0.8318	1.4096
1999-00	0.9797	0.7499	1.0366	0.9745	0.6629	0.6457	0.7407	1.2409
2000-01	0.8316	0.7815	0.9695	0.9210	0.6669	0.7052	0.7564	1.0659

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