

**REVITALIZING POLICIES FOR FOOD SECURITY
AND POVERTY ALLEVIATION IN SOUTH ASIA
Three Case Studies in India**

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Table of Contents

1. Introduction.....	1
2. Research.....	2
a. Scope for Reforms and Private Sector Participation in the Foodgrain Management.....	2
b. Rationalization of Input Subsidies in Agriculture.....	4
• Fertilizer subsidy:.....	4
• Irrigation subsidy	5
• Power subsidy	5
c. Agricultural Diversification and Agro-processing.....	6
3. Conclusions.....	8
Annexure I	9

Revitalizing Policies for Food Security and Poverty Alleviation in South Asia

1. Introduction

South Asia Initiative (SAI) of the International Food Policy Research received overwhelming support from USAID (India and the agency's Global and Asia/Near east Bureaus) along with other donors (particularly Ford Foundation and Asian Development Bank) to strengthen policy research, communication and capacity development. The SAI launched various programs containing three layers: (i) regular dialogues with the Policy Analysis and Advisory Network for South Asia (PAANSA) to strengthen the policy dialogue between researchers and policy advisors/makers of the region, (ii) conduct high quality applied research on issues of importance to the region, and (iii) undertake capacity strengthening programs for researchers and policy advisors. The USAID (India) contributed towards implementing policy research in high priority areas delineated by the PAANSA members to strengthen action oriented research, exchange and training programs, and more effective and frequent policy dialogues with policy advisors and decision makers.

This project is supported by USAID (India) to provide alternative policy options in the emerging debate on following issues:

- a. What role can the private sector play in food grain management, especially in terms of procurement, stocking, distribution and external trade? How cost effective could it be vis-à-vis the public agencies? And finally, what is the appropriate overall regulatory environment for private sector operations?
- b. What has been the role of input subsidies in agriculture? Who really benefits from those subsidies, how effective are they in terms of their impact on agricultural production, what is their impact on the environment, and is there any need to rationalize the subsidy regime?
- c. What has been the nature and speed of diversification in food surplus states of Punjab and Andhra Pradesh? What sort of vertical linkages between the farm and firm are likely to emerge? What sort of enabling environment is necessary for India, particularly Punjab and Andhra Pradesh, to take a lead in graduating to high-value agriculture?

This report documents the activities and accomplishments of the studies for the quarter from October to December 2004.

2. Research

Three interrelated case studies in Andhra Pradesh are in progress and near completion. These studies are related to (i) Scope for Reforms and Private Sector Participation in the Foodgrain Management, (ii) Rationalization of Input Subsidies in Agriculture, and (iii) Diversification of Agriculture and Agro-processing. A brief account of the progress during the reporting period is given below:

a) Scope for Reforms and Private Sector Participation in the Foodgrain Management

During the reporting period, following activities were completed: (i) review the existing food grain management system in Andhra Pradesh, and analyze its functioning during the last two decades; and (ii) estimate and analyze different cost components on per ton basis incurred by the government on food management during the last two decades. Relevant data for these two activities were collected from the offices of Food Corporation of India and APSCSCL. Professionals in Center for Economic and Social Studies (CESS), Administrative Staff College of India (ASCI), Jawaharlal Nehru University (JNU), and Institute of Economic Growth (IEG) were consulted to seek previous reports submitted to central and state governments on the foodgrain management related issue. We concentrated on paddy/rice, as it is the main staple food as well as the major commodity supplied under PDS in Andhra Pradesh. The salient observations are given below:

- The production performance of paddy during the last 5 years was relatively better in Andhra Pradesh as compared to other paddy growing states, viz., Haryana, Punjab, Tamil Nadu and Uttar Pradesh. It was observed that eight out of 23 districts in Andhra Pradesh have done exceedingly well in production and yield of paddy during the last five years.
- The market arrival (as proportion of paddy production) from Andhra Pradesh remained higher than Tamil Nadu and Uttar Pradesh, but lower than Haryana and Punjab.
- The C_2 cost of production (all costs including imputed cost of family labor, owned capital and rental on land) of paddy in Andhra Pradesh has remained higher as compared to Punjab and Uttar Pradesh during the last 5 years.
- The procurement of rice in Andhra Pradesh is mostly done through the levy system, which is fixed at 50%. The contribution of Andhra Pradesh to the procurement of rice in the central pool has increased from about 23% in 1991/92 to 29% in 2001/02. In recent years, contribution of Andhra Pradesh in the central rice pool has remained at par with that of Punjab. Seven districts are the dominant source of total rice procurement from the state during 2003/04. These districts are East Godavari, Karimnagar, Krishna, Nalgonda, Nizamabad, Warrangal and West Godavari.

- During 2002/03, APSCSCL procured two-third of paddy, while FCI procured one-third. A decade earlier, FCI used to be the sole agency to procure paddy in the state.
- The off take of rice in Andhra Pradesh remained at about 55% of total allocation as against 40% at all-India level.
- The total number of fair price shops (FPS) in the state remained at 40,733 as on 1/9/2004, with 81% in rural areas and remaining (19%) in urban areas.
- The PDS utilization data based on 55th round of NSS information revealed that 63% of rural households and 33% of urban households access PDS for rice as against 30% and 20% in rural and urban India.
- The sale price (per kg.) of rice to consumers at FPS in Andhra Pradesh has remained one of the lowest in India, viz., Rs. 5.25 for BPL families, Rs. 4.00 for Welfare Schemes, Rs. 3.00 for AAY and free of cost for Annapurna Scheme. The state fiscal burden is high due to: (i) additional subsidy over and above the Central Issue Price (a legacy from the 2 Rupees Rice Scheme during 1982/83), and (ii) sanctioning of additional BPL cards over and above the central government calculation of poor families. The expenditure to the Andhra Pradesh government for rice subsidy increased from Rs. 2392 million during 2002/03 to 3410 million during the fiscal 2003/04; an increase of approximately 47%.
- The economic cost of rice (weighted average of common, fine and super-fine varieties) with FCI was about Rs. 11837 per metric ton during 2002/03. The expenditure on rice subsidy to APSCSCL worked out to be Rs. 6573.43 per metric ton on account state-specific costs due to freight, storage, handling, commission, interest and administrative expenses. The rise in distribution cost (administrative expenses) contributed to the rise in economic cost of FCI (subsidy to the APSCSCL).
- The available information revealed that the state government expenditure on rice subsidy has grown faster than any other welfare program in recent years.
- Andhra Pradesh is a unique state with regard to its large procurement as well as large PDS off take. The state in comparison to other states is still a better-managed state in terms of overall food management and targeting of the poor. However, there is scope for reforms in some areas. In the next quarter, it is proposed to assess the feasibility of involving private sector in grain management in the state.

b) Rationalization of Input Subsidies in Agriculture

The previous government led by the Telgu Desham Party (TDP) initiated various measures to reform agriculture sector. Both irrigation and power sectors were reformed to improve the efficiency and reduce the fiscal burden. The initiatives included: (i) formation of water users associations that delegated some financial and administrative powers in water distribution and canal management; (ii) raising of irrigation charges to reduce the subsidy on operational and maintenance costs, if not on capital costs; (iii) establishing an Electricity Regulatory Authority and bifurcated the monolithic Andhra Pradesh State Electricity Board into Genco (responsible for generation of power), Transco (responsible for transmission) and five Discoms (responsible for distribution and collection of power charges), and (iv) raising of power charges marginally. The promise of free power to the farmers by the present government led by the congress party and its allies waived all the power arrears and introduced free power to farmers. It has also laid out a massive plan to construct a number of irrigation projects in a short period. In the new set up, the measures initiated by the previous government are of least priority. The bureaucracy, that was actively supporting reforms earlier, has learnt the line of anti-reforms.

Some preliminary results of the study are reported below:

- ***Fertilizer subsidy:***

- The share of Andhra Pradesh in total subsidy went up from an average of 10.64% in the triennium beginning 1980-81 and to about 13.11 per cent in the triennium beginning 1990-91. Its share reached a peak of 14.73 per cent in 1999-2000, but then started descending due to successive droughts and poor inflows of river waters, reaching to an average of 9.38 per cent in the triennium beginning 2001-02.
- The shares of North Coastal Andhra and South Coastal Andhra declined marginally over the period, 1990-91 to 2002-03 while those of Rayalaseema and Southern Telangana increased to some extent.
- Two most drought-prone districts (namely Anantapur and Mehaboobnagar) could improve their shares in fertilizer subsidy marginally during the last two decades.
- The share of small and semi-medium farms in fertilizer subsidy remained constant over the years, but the share of medium and large farms increased.
- The share of marginal farms in the fertilizer subsidy increased in North Coastal Andhra, Central Telangana and South Telangana, but it decreased in Central Coastal Andhra and Rayalaseema. The shares of small and

semi-medium farms remained fairly stable except for a decline in the share of small farms in Rayalaseema and that of semi-medium farms in South Telangana.

- ***Irrigation subsidy***

- Irrigation subsidy has reached to a high of Rs 15.22 thousand million in 2003-04 from 3280 million in 1990-91 and Rs 1200 million in 1980-81.
- The share of Central Coastal Andhra was highest at 41% in 2002-03 and 31% in 1994-95. The share of North Coastal Andhra reached a peak of 17% in 1995-96 but later gradually declined to 14 per cent in 2002-03.
- The three coastal zones together accounted for 77% of the irrigation subsidies in 2002-03. Rayalaseema had a share of only 6%, while the three Telangana zones together had a combined share of 17% in total irrigation subsidy.

- ***Power subsidy***

- Power subsidy accounted for about 54% of all input subsidies in 2003-04 in Andhra Pradesh. It was only 10% in 1980-81 and about 33% in 1990-91. There was a decline in power subsidy from Rs 35.98 thousand million in 2002-03 to Rs 29.73 thousand million in 2003-04 due to reforming power sector.
- Across the region, the shares of North Coastal Andhra, South Coastal Andhra and Rayalaseema in total power subsidy declined during the last two decades but increased in all the three Telangana regions and Central Coastal Andhra. The three regions of Telangana together accounted for 68% of the power subsidies.
- The magnitude of power subsidy increased in all the districts and zones between 1993-94 and 2002-03. But in relative terms, the districts of West Godavari, Guntur and Prakasam in Coastal Andhra and all the Telangana districts with the exception of Medak have increased their shares in the power subsidy.

- ***Input subsidy on per hectare basis***

- The average input subsidy in the state was estimated to be Rs 5690 per ha. It was ranging from a low of Rs 2236 per ha in Visakhapatnam to a high of Rs 16693 per ha in Medak district.

- Overall, it was observed that only those who have some source of irrigation enjoyed a sizable share in input subsidies. The unprivileged ones are the rainfed farmers. This is leading to several social inequities in rural areas and also leading to migration of labor for exploring employment opportunities.

c) Agricultural Diversification and Agro-processing

During the reporting period, following issues were addressed: (i) current marketing system for fruits and vegetables in Andhra Pradesh, and (ii) current status of agro-processing, livestock and fisheries sector in Andhra Pradesh. The key findings are listed below:

- Agriculture and agro-based products contribute roughly half of the total export from Andhra Pradesh. The agro-processing industry assumes great importance in the state. With the lifting of quantitative restrictions on imports by the Government of India, there is a likelihood that Andhra Pradesh would face more imports particularly of fruits and vegetables. The threat is much less with respect to livestock and marine products.
- In recent years the ministry of food processing has taken a number of initiatives to make the food processing industry competitive. This included (i) liberalization of imports of technology, (ii) reduction of duties on import of capital goods required for food processing industry, (iii) foreign technology tie up, and (iv) the food products order 1955 was streamlined to ensure proper quality of processed food.
- The egg powder industry is facing losses due to distortions in world trade of livestock products. To make the industry competitive there is a need to reduce state and central sales taxes. Provide sea freight concession that is compatible with WTO norms, refer containers to be provided on subsidized basis and setting up of quality control labs. The poultry sector neither comes under the agriculture sector nor under the companies act. At the same time poultry income is taxable without getting the benefits under agriculture or industry.
- Similarly aquaculture has to be treated on par with agriculture for providing important services like water, power, and credit. The government has also drafted a bill on aqua culture seed quality control order. To promote aquaculture, road linkages to landing centers are critical for quick disposal of produce. The environmental issues related to aquaculture need to be addressed since it leads to negative externalities not only for the environment but also effects non-participating producers adversely.
- For the milk sector the supply chain system has to be revamped. Provision of bulk coolers and its link with chilling /processing plant is essential. Institutional reforms would play an important role in the dairy sector. The government has already taken a lead by promoting mutually aided cooperative

societies in Andhra Pradesh that are free from government interference since they are not attached to the state level Federation. This provides autonomy to the societies from government interference.

- Equally important is adherence to quality standards and SPS standards of importing countries. Andhra Pradesh government has to pay particular attention to SPS standards related to marine products (prawns and fish), mango fresh and processed, grapes fresh, gherkins, spices chillies and milk and milk products. The standards should ultimately facilitate branding of products.
- The agro-processing industry can be competitive if the concept of producers to processors is promoted vigorously to eliminate middlemen and reduce transaction costs through suitable changes in the contract act. Presently the entire value chain of agriculture has to go through 12 union ministries, which cause enormous delay in obtaining the necessary permissions.
- Regulated market yards for fruits and vegetables cover only few districts of the state. Fruit markets are located in Hyderabad, Warangal, Vijaywada, Rajamundry, Nellore, Chittor districts located in the major towns. Vegetable markets are more in number covering more districts but concentrated in Telengana region. The government has also started '*raythu bazaars*' where farmers sell directly to consumers. Presently there are 97 such *bazaars*. The producer's share in consumer's rupee varies from 50 to 65% for both fruits and vegetables, depending on the channel. Producers share is more than 90% in *raythu bazaars*.
- For fruits the common practice is to sell/auction the produce to pre-harvest contractors a few months prior to harvest. In the regulated markets the commission agent charges 4% of the value of the produce and market fees of 1% of the value of produce is normally borne by the buyer. The infrastructure facilities available at the market are generally poor. There is lack of knowledge and equipment for grading and packing of fruits and vegetables. Generally the prices are low immediately after harvest due to glut in the markets, which is exploited by the middlemen to their advantage. Small farmers are unorganized and lack group action in bargaining. Horizontal integration of farmers for select commodities is an option to increase their bargaining capacity. Integrated pack houses or common cold storage centers close to the area of production would help in reducing large price fluctuations and also post harvest losses.
- The present system of marketing is a monopoly of government regulated wholesale markets with little room for other players like private sector, industry, cooperatives etc. The model act on agricultural marketing presently under consideration by the government has provision for the entry of private sector, cooperatives and corporations for setting up special commodity

markets, direct sales by farmers to consumers, and professionalization of the present marketing set up. The act also provides for registration of all contract farming agreements and exemption from levy of market fees on produce covered under contract farming. Karnataka government has taken the lead on the amendment of the marketing act that now allows for setting up of integrated producer market for sale of fruits, vegetables and flowers. There is also a need to promote pledge financing and negotiable warehousing receipt system.

- For a more concerted effort to promote exports of horticulture products the government of Andhra Pradesh has promoted agri-export zones. Presently there are four zones covering gherkins, mango and products, grapes, and vegetables. Farmers, agro processors and exporters falling in these zones are allowed access to present schemes on a priority basis including some concessions /subsidies. The government is presently planning for similar types of zones for poultry, banana and pomegranate.

3. Conclusions

The studies in Andhra Pradesh and Punjab on (i) grain management, (ii) input subsidies, and (iii) agricultural diversification and agro-processing, are progressing well. A summary of the research studies in these three areas is attached in Annexure I.

The two research studies in Punjab on (i) private sector participation in grain management, and (ii) rationalization of input subsidies, are under review process. And the study on agricultural diversification is under drafting stage. All three studies in Andhra Pradesh are in advance stage.

We express our appreciation to the USAID (India) for extending full support for undertaking policy research in 3 key areas, which influence agricultural growth in India.

Annexure I

Summary table on progress of the project

S. No.	Activity	Achievement
1	Private sector participation in grain trade in Punjab and Andhra Pradesh	<ul style="list-style-type: none">• Report on 'grain management in Punjab' is under review.• Review the existing grain management system completed• Cost estimates of public sector grain management completed
2	Rationalization of input subsidies in agriculture	<ul style="list-style-type: none">• Report on 'rationalization of input subsidies in Punjab' is under review.• Validation of estimates made on inter-regional distribution of input subsidies and different categories of farmers in Andhra Pradesh.
3	Diversification of agriculture and farm-firm linkages in Punjab and Andhra Pradesh	<ul style="list-style-type: none">• Agricultural diversification in Punjab is under drafting stage• Study on current marketing system for fruits and vegetables in Andhra Pradesh• Study on current status of agro-processing, livestock and fisheries sector in Andhra Pradesh.