



**Dr. Mahesh Pathak**  
Hon. Director (1972-2006) and  
Hon. Adviser (since 2006)  
AERC, SPU, Vallabh Vidyanagar

Dr Mahesh Pathak has over five decades of teaching and research experience in public policy. Attracted by the presence of H. M. Patel (ICS Retd.) in Vallabh Vidyanagar, he came to this educational township in 1960. He obtained his Ph.D. degree from the Sardar Patel University in 1963.

He served in the Post Graduate Department of Economics of the Sardar Patel University (1963-1994). He also provided his services to the Agro-Economic Research Centre first as Hon. Director (1972-2006) and later as Hon. Adviser (since 2006). It was because of his efforts that an enduring and rewarding relationship between the Department and AERC flourished. It was also because of his sustained efforts that an Institute Umbrella was established by the university to ensure that both work together for their mutual benefit. For the past thirty years, Dr. Pathak has been providing his services to the Agro Centre without any remuneration.

He served for 15 years as Executive Member of the Narmada Planning Group (1984-98) constituted by GOG. He was also invited to serve as Chairman of the Agriculture Commission constituted by GOG (1987-90). He served as member of several high level expert committees constituted by the government.

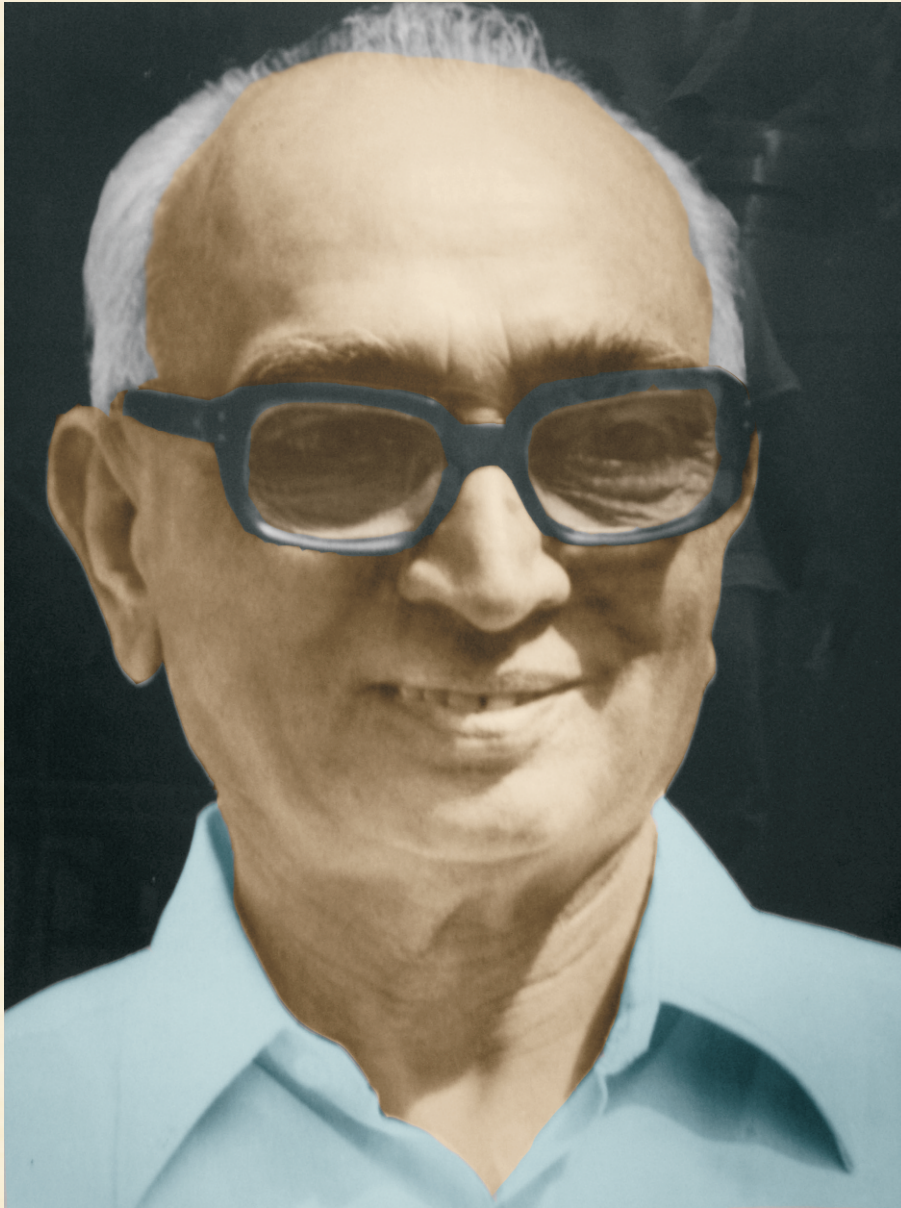
## **My Memoirs on Five Decades of Agro-Economic Research Centre Vallabh Vidyanagar**

**Dr. Mahesh Pathak**



**AGRO-ECONOMIC RESEARCH CENTRE**  
For the states of Gujarat and Rajasthan  
(Sponsored by Ministry of Agriculture, Govt. of India)  
**SARDAR PATEL UNIVERSITY,**  
Vallabh Vidyanagar, Dist. Anand, Gujarat, India

## An Institution Builder Par Excellence



**H. M. Patel, I.C.S. (Retd.)**  
(August 27, 1904 – November 30, 1993)

## Glimpses of the Inugural Function of H. M. Patel Institute of Rural Development at the hands of Shri Narendra Modi, the then Chief Minister, Government of Gujarat, on December 25, 2001



Hon. Chief Minister Shri Narendra Modi arrives for inauguration



Hon. Chief Minister Shri Narendra Modi and Dr. Mahesh Pathak lighting the lamp

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***About the Centre:***

The Agro-Economic Research Centre (AERC) for the states of Gujarat and Rajasthan was established in July 1961 at the Sardar Patel University, Vallabh Vidyanagar by the Directorate of Economics and Statistics, Ministry of Agriculture, Government of India, New Delhi. AERC has been working as an associate institution of S. P. University and enjoying autonomy status in its working. The Centre has completed 53 glorious years (1961-2014) of its journey marked by both achievements and challenges. During these years, the Centre has emerged as a strong policy feedback centre of the Ministry of Agriculture, Government of India due to hard work and strong commitment of the staff in the Centre. The focus of research effort in the initial stage was on comprehensive village surveys and resurveys in order to understand the process and direction of change at the village level. Subsequently, the emphasis of research has shifted to problem oriented studies. The Centre has by now completed 153 problem-oriented studies, 21 village surveys and 4 village resurveys. During its long journey, the Centre has brought remarkable improvement in every aspect of research including methodological base of the studies. The studies have come out with useful findings and policy implications for agricultural and rural development of the states of Gujarat and Rajasthan.

***Published by***

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# **My Memoirs on Five Decades of Agro-Economic Research Centre Vallabh Vidyanagar**

*Mahesh Pathak<sup>1</sup>*

## **I. Background:**

That as an institution Agro-Economic Research Centre, Vallabh Vidyanagar (AERC VVN) has crossed an important milestone of 50 years is an important landmark worth commemorating. I had the privilege of closely watching AERC, VVN right from day one for almost five decades. A wave of nostalgia sweeps over me as I think of the Centre which faced both formidable challenges and exciting opportunities during its long journey. As I think of this institution, lots of ideas pass through my memory lane on how and with what vision this Centre was established at VVN. Was the AERC VVN regarded as just a routine government scheme to provide every year four or five reports to the Government of India (GOI)? Those who shaped this Centre thought otherwise. It was visualized to perform a much wider and meaningful role for serving the cause of rural transformation. This note attempts to unfold the story about how this Centre has strived to serve a wider public purpose. These reminiscences may hopefully provide some lessons for the future ahead.

The Centre had made a humble beginning with staff strength of three and a half persons, a Deputy Director (Dr. V. S. Vyas), a Senior Research Assistant (Mahendra Desai), a part time Stenographer (Antony) and a peon (Joseph). The Centre was occupying two small cabins in the huge newly constructed Humanities Building of the Sardar Patel University. The Centre gradually developed, and when the Cost of Cultivation Scheme (CCS) was established in 1970, the Agro Centre was occupying half of the ground floor space of the huge Humanities Building. The space occupied by the Centre was so large that it became a subject of debate on space allocation for many other departments located here and were growing over a period of time. Infrastructure facilities provided by the University were modest and yet the Centre strived to flourish as a leading research institute of its kind. This note is intended to acquaint the reader about the contribution that AERC, VVN has made in the field of survey based research for understanding the content and direction of rural transformation in India in general and in Gujarat and Rajasthan in particular.

AERC, VVN had the unique advantage of being located in an educational township which was primarily established to serve the cause of rural society. It was late Shri Vallabhbhai Patel, the first-Deputy Prime Minister of independent India, who had inspired two veterans ó Shri Bhailalbai Patel and Shri Bhikhabhai Patel - to promote education for serving the village people. Their pioneering efforts led to the creation of an educational township known as Vallabh Vidyanagar (1946).

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<sup>1</sup> Former Hon. Director (1972-2006) and current Hon. Adviser of the Agro-Economic Research Centre, Sardar Patel University, Vallabh Vidyanagar (Email: mhpathaks@yahoo.in).

Three important events preceded the establishment of AERC, VVN. First, the Sardar Patel University (known as Sardar Vallabhbhai Vidyapeeth in the initial years) was established in 1955 with a mission to serve the cause of rural transformation. Second, the Post Graduate Department of Economics, established in 1958, had also accepted agriculture and rural development as thrust areas for its teaching and research programme. Third, and perhaps very crucial, late Shri H. M. Patel, one of the ablest ICS officers of our country, decided to settle in Vallabh Vidyanagar in 1959. Putting aside many alluring assignments which he could have easily obtained, he decided to serve the cause of rural development which was so close to his heart. These three developments provided an ideal setting for establishing AERC, VVN. It can be regarded as one of the most appropriate and satisfying activities to be undertaken in this township.

AERC VVN story began like this. Prof D. G. Karve, Prof. D. R. Gadgil and Dr S. R. Sen had been invited by Shri H. M. Patel to visit this campus when they came to Baroda in 1959 for attending the Annual Conference of the Indian Society of Agricultural Economics. It was during this visit to Vallabh Vidyanagar and to a nearby village (Kavitha) that the idea of establishing an institute for rural studies in this campus was mooted. It was late Shri H. M. Patel who, with his vision and foresight, persuaded the Ministry of Agriculture, Government of India to establish such a Centre at Vallabh Vidyanagar in order to strengthen the teaching and research activities in economics in the university campus. He always gave prime importance on building value based academic institutions in Vallabh Vidyanagar.

## II. Unique Advantages AERC VVN:

Several unique advantages enjoyed by this Centre may be noted here:

1. It was entrusted to the Sardar Patel University which had been primarily established for serving the cause of rural transformation.
2. AERC, VVN enjoyed necessary autonomy in its working. Its administrative integration with the university was established by keeping the university Vice Chancellor as Chairman of the Governing Body. Credibility for the Centre was ensured as it was sponsored by the GOI and associated with the Sardar Patel University.
3. AERC, VVN was successfully launched because of H. M. Patel, who not only persuaded the GOI to establish the Centre at Vallabh Vidyanagar, but also assiduously nurtured and shaped its subsequent development to evolve as a Centre of excellence. For a man of his stature, AERC, VVN was a small institution, yet it was always close to his heart. During his long stay in Vallabh Vidyanagar (1959-1993) he invariably attended all Governing Body meetings, provided constructive suggestions and stubbornly defended the interest of AERC, VVN. He did not miss our governing body meeting even when he was the Finance Minister, Government of India!

4. When H. M. Patel asked Prof. M. L. Dantwala to suggest a suitable person to head the Centre, he had suggested the name of Dr. V. S. Vyas. AERC, VVN was singularly fortunate to have Dr. V. S. Vyas as its founder director. He was picked up at the young age of 30. Dr. Vyas will always be remembered for the admirable leadership that he provided with his robust positive outlook, his habit of hard work and his keen desire to strive for excellence. Not only did Dr. Vyas fully enjoy the excitement and euphoria of building a new institution, he also encouraged his young team to participate in this worthy endeavour.
5. Another major strength of AERC, VVN has been the association with its Governing Body of some of the most distinguished economists of our country such as H. M. Patel, M. L. Dantwala, M. V. Mathur, D. T. Lakdawala, Prof. R. K. Amin, Prof. V. S. Vyas and Dr. Y. K. Alagh. The vision and foresight of these highly qualified and well respected individuals effectively shepherded the smooth working and growth of this institution.

The University Vice Chancellor also has a key role to play in organizing the work of the Centre. By now about a dozen Vice Chancellors have chaired the Governing Body of this Centre and all of them have strived to ensure its smooth working. This healthy tradition was established right from the inception of the Centre. This was indeed a major advantage for the Centre.

6. Its academic integration with the Department of Economics was well planned and executed. A senior faculty member of the Department was appointed as Hon. Director but the established tradition was that he always worked as full time Director. I became Hon. Director of the Centre in 1972. Around 1984, keeping in view my other important assignments, the University had arranged for providing some additional support at the senior level. Two faculty members of the Department also served as Hon. Joint Directors, Dr. H. G. Patel for a brief spell and Dr. H. F. Patel for more than a decade. There were other senior faculty members of the Department, Dr. Arun Patel, Dr. Dilip Bagchi and Dr. Dilip Chauhan who were always available for project specific assistance never claiming any remuneration for the valuable services rendered by them. I continued to serve as Hon. Director of the Centre for a long period (1972-2006). Thereafter, two senior professors of the Economics Department, Dr. P.K. Singh (2006-2008) and Dr. H.P. Trivedi (2008-2010) rendered their useful services as Hon. Directors. Thus AERC, VVN had been, right from its inception, working in close collaboration with the Post Graduate Department of Economics of the Sardar Patel University. They have grown together supporting each other for over five decades. This close academic linkage between the two proved to be highly rewarding and mutually beneficial to both.

The Department of Economics had also made a humble beginning. Initially it was located in a Commerce College known as B. J. Vnija Mahavidyalaya. All the six persons working in the Department, including a Professor (R K Amin), a Reader (V S Vyas) two lecturers (M P Bhatt, K S Gulati), a Research Assistant (Mahesh Pathak) and a Stenographer (George) were sitting in a single room provided by the college. In the initial years, hardly 8 to 10 students used to join for their M. A. Course. The Department was shifted in 1960 to the huge Humanities Building. Today around 150 students are enrolled for M.A. Course and around 25 students for their M. Phil and Ph.D.

How fruitful was the collaboration between the Centre and the Department will be evident from the fact that over the years the Department made significant progress in both its teaching and research programme. The UGC, recognizing its creditable past record, identified agriculture and rural development as its thrust areas and awarded its Special Assistance Programme (SAP) for three consecutive phases of five years each. The Department also received Rs. 40 lakhs from the UGC under its ASIHSS (Assistance for Strengthening Infrastructure in Humanities and Social Sciences) Programme. More recently, the UGC has recognized the Department as a Centre of Advanced Studies (CAS) in economics. During its long journey of over five decades, apart from providing rigorous teaching at the post graduate level, the Department prepared more than 100 project reports and guided 43 M. Phil and 50 Ph. D. students.

7. In 1970, the Directorate of Economics and Statistics, Ministry of Agriculture, GOI had entrusted the Comprehensive Scheme to Study Cost of Cultivation of Principal Crops in Gujarat (CCS) to the Sardar Patel University which in turn asked AERC, VVN to organize this work.

Work on collecting cost of cultivation data for Gujarat had began in Vallabh Vidyanagar even before the CCS was launched in 1970. The Department of Economics of the university had organized Farm Management Scheme (FMC) of the Ministry of Agriculture, GOI for a three year period (1966-1969). Prof. R. K. Amin and later Dr. J. H. Adhvarya were in-charge of this Scheme. A comprehensive three year consolidated report of this project was prepared by J. H. Adhvaryu and J. C. Patel. This experience proved to be of great help in organizing the work of CCS which had absorbed most of the experienced staff of FMC.

Only two Agro-Economic Research Centres (Vallabh Vidyanagar and Shimla) enjoyed the advantage of CCS attached to them. This was a big advantage for AERC, VVN with 60 field men of CCS posted in villages spread throughout Gujarat.

How important was the CCS network will be evident from the fact that data generated by this Scheme were used by the Commission on Agricultural Costs and Prices (CACPC) established by GOI for fixation of minimum support prices.

How the data generated by CCS were useful for several other purposes as well comes to my mind. I vividly remember several such examples, The Tata Economic Consultancy Services (TECS) wanted cost of cultivation data for Gujarat for their economic appraisal study on Sardar Sarovar Project. Reliable and Systematic cost data for Gujarat were just not available elsewhere. We had supplied these data for Gujarat in specially designed formats for a three year period ending 1976-77. As the regular compilation work of CCS was in full swing the DES, MOA had laid down the condition that TECS work should be done in extra hours. I vividly remember how a team of about 20 CCS/AERC staff had worked from 7 p.m. to 12 mid night for 45 days to accomplish this herculean task!

Similarly, the Agriculture Commission constituted by the GOG (1987-90) wanted to study trends in the cost of cultivation in Gujarat. There was no other reliable source except CCS for this purpose. Based on CCS data for 42 crops for two year periods ending 1976-77 and 1984-85, Dr. A. S. Patel and Dr. H. F. Patel had prepared this report for the Agriculture Commission.

CCS data proved useful to Ph.D. Scholars also. Among them, I remember the name of Dr. P. K. Mishra, an IAS officer of Gujarat cadre, who subsequently became Secretary, Agriculture, GOI, had gone to IDS, Sussex for his Ph.D work. He wanted some cost of cultivation data for Gujarat for his Ph.D. work which we had supplied as per his requirement.

Looking back, I have a feeling that data generated by CCS constitute a gold mine which deserves to be explored more extensively by the research workers.

8. Another unique advantage for AERC, VVN was the launching of a house journal which facilitated the publication of regular research output of both the Department of Economics and the Agro Centre. The decision to publish a house journal was taken in early sixties in an informal meeting between H. M. Patel, R. K. Amin, V. S. Vyas and Mahesh Pathak. This led to the launching of Artha Vikas ó A Journal of Economic Development in 1964. This journal has successfully completed 50 years of its publication in 2014 and it is celebrating this occasion by bringing out a special Golden Jubilee Issue. The Editorial Board of Artha-Vikas has decided to dedicate this Special Issue to H. M. Patel.

### III. Major Achievements of AERC, VVN :

Given its limited resource base, AERC VVN cannot boast the status of a high profile research institution. However, the Centre has emerged as a leading Centre of its kind in the country and has to its credit several noteworthy achievements which may be mentioned here:

1. **Research effort:** There are three noteworthy features of the research effort made by the Centre. First, the primary responsibility of AERC, VVN has been to undertake studies sponsored by DES, MOA, GOI. The focus of



research effort has, therefore, always been on relevant research on subjects enjoying high national priority. Second, a remarkable feature of these studies has been that they have always provided an objective and independent feedback to the Government. Looking back, this feature appears to be the most satisfying as neither the Central nor the concerned State Governments (Gujarat, Rajasthan) have ever exerted any pressure in preparing these reports. Third, during its fairly long research journey spread over five decades, this Centre has built up a comprehensive and systematic data base relating to the rural economies of Gujarat and Rajasthan. Collection of high quality field data has also been a widely recognized hallmark of AERC, VVN field research. When it comes to data collection from the field, even institutions of repute at times falter on this score. Decades of experience has made us realize that data collection relating to agriculture and allied activities calls for specialized expertise which needs to be nurtured over a period of time.

2. **Seminars and Conferences:** This Centre was not perceived as a routine government scheme requiring only submission of four to five reports to the Government of India. AERC, VVN had built up a very high reputation for organizing seminars and conferences (jointly with the Post Graduate Department of Economics) on a regular basis. Three guiding principles had been evolved for organizing such seminars.

First, important public policy issues were carefully selected for discussion. The usual convention had been

that some seminal work done by the faculty would form the basis for organizing such academic interactions.

Second, these seminars were expected to cover a good cross section of participants including academics, administrators, policy makers and other concerned stakeholders. This made it possible to ensure that the seminar deliberations were focused on ground realities. Vallabh Vidyanagar seminars were attended by distinguished experts from all over the country.

Third, VVN seminars had adopted, as advised by H. M. Patel, a unique practice of preparing a statement of consensus at the end of the seminar. This was prepared on the basis of a careful review of seminar deliberations. This practice made the seminar deliberations focused, relevant and meaningful. The seminar proceedings were published in special issues of *Arth-Vikas*, a journal of economic development published by the Department of Economics.

Among the conferences organized by the Centre, two were memorable and worth remembering. First, this Centre, which was established only in 1961, had taken a bold initiative of organizing the 24<sup>th</sup> All India Agricultural Economics Conference in 1964. Notwithstanding the obvious hardships of initial years, this event was successfully organized with Ashok Mehta, the then Deputy Chairman of the Planning Commission, as Conference President. Everybody, including eminent senior economists like D. R. Gadgil, D. G. Karve and M. L. Dantwala, had appreciated the event management.

Another memorable event was the organization of 45<sup>th</sup> All India Agricultural Economics Conference in 1985. This event was a part of the Silver Jubilee Celebrations of AERC, VVN. Dr. Nilkanth Rath was the Conference President and it was inaugurated in the presence of distinguished guests such as V.K.R.V. Rao, H. M. Patel, V. Kurien and M.L. Dantwala. It was an event to remember with participants from all over the country. Several conferences of the Gujarat Economic Association were also successfully organized at Vallabh Vidyanagar (1971, 1985 and 1994).

Put together the Centre and Department have organized around 35 seminars/conferences during the period of five decades. Such an extension effort always provided excellent opportunities to the teachers and research workers to receive meaningful feedback from wider academic community and senior administrators and policy makers.

3. **Ph.D. Support Programme:** Remarkable close collaboration between AERC and Department of Economics for five decades has generated significant external economies for supporting Ph.D. scholars working in the Department of Economics. Ph. D scholars easily obtained required secondary data from AERC data bank. Research scholars also benefited from the experience of available field survey schedules and tabulation schemes for data processing. AERC, VVN made a useful contribution for helping about 35 scholars to successfully

complete their Ph.D. work. Around a dozen out of them were the faculty members of the Agro Centre who completed their Ph. D, while in service. All of them had scaled high peaks in their professional career. There were some faculty members in the Centre who never obtained a Ph. D degree, but who had produced several quality reports which were good enough to earn a Ph. D degree. Both Mahendra Desai, who was in the Centre during the first phase (1961-1977) and V. D. Shah, who had a fairly long tenure of 40 years at the Centre (1973-2013) provided informal guidance to many students in their Ph.D. work.

4. **Technical Support to the Department of Economics:** The PPM Cell of Irrigation Department, Government of Gujarat had asked Dr Arun Patel of the Department of Economics to conduct about 30 socio-economic surveys for medium irrigation projects for World Bank assistance. While the Department had its own staff to undertake these studies, the AERC, VVN provided technical support as required. Similarly, support was made available, as and when required, for many other field survey based research projects undertaken by the Department.
5. **Technical Support to Government:** The GOI mandate for all Agro-Economic Research Centers was that they will provide, as and when required, technical advice and support to government. The AERC, VVN had the privilege of rendering such services at the highest level. The Centre had, in its own modest way, strived to build bridges of understanding between ground realities and

macro public policies. It had prepared evaluation reports on almost all major agriculture and rural development programmes launched by GOI since 1961. Based on intimate knowledge of local conditions and ground realities, they provided useful feedback to the MOA, GOI. The Centre served as eyes and ears of the Ministry in the true sense of the term. This Centre, along with all others, participated in the Common Studies Programme where all the Agro Centers jointly undertook studies on issues of national importance. Based on common objectives and methodology, these studies also provided valuable feedback to the Ministry.

AERC, VVN had undertaken some special studies sponsored by the Planning Commission. In the late sixties, this Centre had produced two seminal studies for the Planning Commission, one on Conditions of Stability and Growth in Arid Agriculture (1968) and the other on Significance of New Strategy for Small Farmers (1969). In late eighties, the Planning Commission had launched a planning programme based on agro-climatic conditions. As required by the Planning Commission, AERC, VVN had prepared profile as well as strategy reports for both Gujarat and Rajasthan (1988). More recently, the Planning Commission had asked this Centre to undertake evaluation of Comprehensive District Agriculture Plans (C DAP). This Centre had prepared evaluation reports for three districts each for Gujarat (2010) and Rajasthan (2011).

AERC, VVN had also provided technical support and advice at the state level. Usually the Centre carried out the same studies for both Gujarat and Rajasthan. A pleasant redeeming feature of our experience has been that whenever our project teams visited Rajasthan, they invariably received a very warm and supportive response from the administration. Some of my senior colleagues, who often visited Rajasthan for their studies, always admired the excellent cooperation provided by Rajasthan administration. I am tempted to quote here an incident which reflects how prompt the administration was to our needs. Dr. Rajeshree Dutta and V. D. Shah, two of my senior colleagues, had gone to Rajasthan to collect data relating to their projects on State Budgetary Resources for Rajasthan Agriculture and Revised National Watershed Development Project. It so happened that a senior officer, not familiar with our work, insisted that the required data cannot be given unless they produce an official letter from the GOI! When this matter was brought to the notice of Ashish Bahuguna, who was then Principal Secretary, Agriculture Rajasthan, he promptly called all the concerned officers in his chamber and instructed them to provide the required data on a priority basis. Reports prepared for Rajasthan were regularly sent to all the concerned officers and they found the reports very useful. During our official visits to Rajasthan, we were also informed that inputs provided by our reports were used for policy purpose. In more recent years, the Rajasthan Government has been putting the main findings of some of our reports on their official website. The Directorate of Economics and Statistics of the Ministry of Agriculture

had asked the Centre to prepare a long term review report on Rajasthan Agriculture, Dr. Dilip Bagchi had helped us in preparing this useful report. Principal Secretary, Agriculture, Rajasthan had invited the Centre to make a presentation of this report before senior officials of agriculture department at Jaipur (October 2006). Dr. V. S. Vyas and several faculty members of the Institute of Development Studies, Jaipur also participated in this meeting. Rajasthan was as close to my heart as Gujarat and the Centre was always keen to provide whatever assistance it can on the basis of experience and expertise that it had acquired.

The Government of Gujarat made extensive use of expertise available with the Centre. Two Chief Ministers of Gujarat, Ghanshyambhai Oza and Chimnabhai Patel, visited Vallabh Vidyanagar to inaugurate two important seminars organized by the Centre, one on Development of Backward Regions (1972) and the other on Narmada Project (1992).

Sanat Mehta has been a well known figure in the public life of Gujarat who not only used to read our reports but, what is more, used them judiciously for his work. Recognizing the usefulness of our study on Inter-District Variations in Agricultural Development in Gujarat, Sanat Mehta, then Minister Planning, GOG, had asked the Centre to organize a workshop on this subject for senior officers of the Agriculture Department. A 17 page statement of consensus was released at the end of two days workshop making concrete region specific and

crop specific recommendations for future development (1983).

As required by the World Bank, GOG had constituted the Narmada Planning Group (NPG) for organizing various technical, socio economic and environmental studies required for this mega project planning. A unique opportunity to serve a public purpose came our way when in November, 1983, B. J. Desai, Special Secretary, GOG wrote a letter to our Vice Chancellor requesting the university to depute me for serving as a full time Executive Member of NPG. Our Vice Chancellor, Prof. K. N. Shah, tried to persuade me to accept this coveted post, which was informally equated to the post of Secretary by GOG. While fully recognizing the importance of this assignment and the need for rendering services for a worthy cause, I was of the view that whatever work that I was doing at Vallabh Vidyanagar was also important and, therefore, I should not accept any outside assignment at the cost of my work at Vallabh Vidyanagar. Hence, my submission to GOG was that I am willing to provide my services on a part time basis. I also assured GOG that even though my headquarter will be at Vallabh Vidyanagar, I would spare all the time required for attending to NPG work. I kept my promise till the end of my tenure, spending the prime time of my life for a mega project so important for Gujarat and for the country. GOG also endorsed my view that it would be in the interest of both university and GOG if I serve on a part time basis. It was decided that my expertise and experience will be used for more specific and programme

oriented work and not for routine day to day work. I joined, NPG in May, 1984 with an initial offer from government for one year, which it continued for 15 years (1984-1998). As I used to spend on an average 3 days per week for NPG work, Gandhinagar Circuit House virtually became my second home for 15 years! A large number of research institutes and universities (including SPU and AERC, VVN) were involved in preparing numerous studies required for this project. Working together as part of a team with Secretary level officers for as long as 15 years was an experience that one would like to cherish for a life time. My association with NPG was very rewarding and it served in several ways the mutual interest of both GOG and University.

Gujarat agriculture was facing a crisis situation following three consecutive drought years in mid eighties. In June 1987, I received a surprise telephone call from Amar Singh Chaudhary, then Chief Minister of Gujarat, enquiring whether I will be willing to serve as Chairman of Agriculture Commission that the government wanted to constitute. Recognizing the work done by AERC, VVN, I was invited to be the Chairman of the first ever Agriculture Commission constituted by the Government of Gujarat (1987-90). This Commission had arranged for many studies and it made an in-depth review of agriculture by visiting each district and arranging dialogues with farmers, administrators, academics and representatives of the people. AERC, VVN had also prepared some useful reports for this Commission such as Terms of Trade for Gujarat Agriculture, Trends in the

Cost of Cultivation in Gujarat and some district profiles of agriculture in Gujarat. An Empowered Committee constituted by the GOG to review this report had accepted nearly 80 to 85 per cent of the recommendations made by the Commission for implementation.

Government of Gujarat has been regularly inviting representatives of AERC VVN for their annual meetings to discuss issues relating to recommendation of minimum support prices. AERC, VVN was also represented on a number high level expert committees constituted by the GOG. Such an interface with the government, nurtured through productive linkages, proved to be of great mutual benefit.

More recent experience of AERC, VVN also indicates that it continued to provide feedback for public policy in Gujarat. It was during the tenure of Narendra Modi as Chief Minister and Bhupendrasinh Chudasama as Agriculture Minister that the signs of rapid transformation in Gujarat agriculture became visible on the horizon and success stories about the dramatic turnaround in Gujarat agriculture began to be scripted. Bhupendrasinh, a well known figure in the public life of Gujarat, admired the work of AERC, VVN and used the inputs provided in our reports.

Around 2000, the Directorate had asked the Centre to prepare a long term review report on Gujarat agriculture. Dr. Arun Patel had prepared this useful report covering the period 1960-2000. Bhupendrasinh himself

took the initiative to invite us for making a presentation before the senior officers of the government and agriculture universities (November, 2006).

Bhupendrasinh had also adopted a healthy practice of arranging every year a meaningful dialogue between the senior government officers and a couple of senior experts from Gujarat. The usual procedure followed in these meetings was that Secretary, Agriculture made a presentation on the work done in the past year and work to be undertaken in the next year. Thereafter, invited experts gave their comments. AERC, VVN was invariably invited for these meetings.

Shri Narendra Modi, then Chief Minister of Gujarat, had introduced an innovative practice of organizing every year (since 2003) Chintan Shibirs for Ministers and IAS Cadre Officers to promote good governance. There were departmental Chintan Shibirs as well where the Chief Minister himself, the concerned Minister, the Chief Secretary and all Class-I officers used to remain present. I was invited to address one such Chintan Shibir organized by the Department of Agriculture.

#### **IV. The Institute Umbrella :**

It will be evident from the narration so far that an enduring and very fruitful relationship had been established between the Post Graduate Department of Economics and Agro-Economic

Research Centre. The academic integration between the two was effectively ensured by appointing a senior faculty member of the Department as Hon. Director of the Centre. It turned out to be a mutually beneficial and highly rewarding unique partnership which enabled both of them to flourish together.

Both the Department and the Centre were successfully working together in the Humanities Building of the University for several decades. However, our past experience clearly indicated our future requirements: arrangements were necessary to ensure that they work together on a permanent basis: they have to establish their separate identity and they should enjoy reasonably good modern amenities required for their smooth working. These basic requirements could not have been fulfilled without a separate building. I had prepared, in consultation with my colleagues, a proposal to put both the Department and the Agro Centre under the common umbrella of an Institute. The idea of the Institute was, in a sense, a pragmatic, down to earth response to the pressing requirements of this flourishing partnership. The academic environment provided by a complex of institutions located in and around Vallabh Vidyanagar offered ample opportunities for developing a Centre of excellence for teaching and research relating to rural economy in this campus. Our university welcomed this idea on the condition that the funds required for a separate institute building will be mobilized by us. I sought the advice and guidance of H. M. Patel on this important issue. He appreciated the merit of this idea and encouraged me to go ahead with the fund raising effort. Other senior economists associated with the Centre including M. L. Dantwala, D. T. Lakdawala, V. S. Vyas and Y. K. Alagh also supported the Institute proposal.

We were faced with two major problems in implementing this project proposal. First, we were required to mobilize funds required for the Institute building. This fund raising exercise was a unique experience by itself. When an ambitious project is launched one is bound to encounter some incorrigible prophets of doom. There will be others who just display benign neglect for such initiative. It was an established fact that both the Department and the Centre had successfully worked together for several decades. That two such fully funded institutions, one by the UGC/State and the other by GOI, constituted a solid potential material for an Institute was neither understood nor appreciated by several people whom we approached. However, when you are working for a worthy cause, you come across some angels also. H. M. Patel was one of them. He not only appreciated the proposal but also backed the idea.

Despite some initial setbacks, the idea was relentlessly pursued. Dr. Y. K. Alagh and I had gone to Delhi to meet Dr. Manmohan Singh who was then Finance Minister of GOI. He appreciated the merit of our proposal and arranged for providing some financial support for the Institute building. Similarly, H. K. Khan (former Chief Secretary, GOG) and Dr I. G. Patel also appreciated the proposal and encouraged us by providing some financial support from GSFC Research Foundation. Our fund raising efforts helped in mobilizing 50 per cent of the funds required for the Institute building. The university was good enough to contribute the balance 50 per cent of the total amount required (Rs. One Crore).

The second major problem was related to the location of the Institute building. All of my colleagues wanted to have this building close to the main University Campus. H. M. Patel took keen interest in this matter and persuaded the university to provide us space close to the main campus. The University did provide us space close to the main campus. Unfortunately, the building plan proposed for the Institute did not fit into the allotted site. Other suggested sites, though large enough, were not favoured because they were not within the main campus. At this stage, I had a chance meeting with Dr. C. L. Patel who had succeeded as Chairman of the *Charutar Vidya Mandal* after the sad demise of H. M. Patel. I briefed him about the progress made by us in our project and also indicated the major hurdle of space faced by us. His response was prompt and dramatic. He said to me "Dr. Pathak, we have a site close to the main campus which we have earmarked for another project. However, you are far ahead in your project work and as the university has decided to associate the name of H. M. Patel with this Institute, I am willing to give this land to the University for this worthy cause!"

The Charotar Vidya Mandal gave to the University a large 2660 sq. yard plot (current value around Rs. 4 crore) on a 99 years lease with a token rent of Rs. 1 per year. This was indeed a fine gesture of goodwill that needs to be remembered forever! The building project was delayed due to various constraints. However, ultimately we succeeded in providing a common Institute Umbrella (**H.M. Patel Institute of Rural Development**) for the Department of Economics and Agro Centre. It is a thrice blessed Institute that we have inherited. First, the Institute had the blessings of late Shri H. M. Patel who appreciated the idea and provided much needed backing for this

dream project. His vision and foresight and his rock solid support and encouragement had played a major role in shaping the Department of Economics and Agro-Economic Research Centre. Recognizing his valuable contribution, the Sardar Patel University had decided to associate his name with this Institute. Second, Pramukh Swami Maharaj, a well known saint of Gujarat, laid the foundation stone of our building. As he was aware about our ambitious project, he readily agreed to come and give his blessings for future progress. Third, the Institute building was inaugurated by **Hon. Chief Minister of Gujarat Shri Narendra Modi on Tuesday, 25 December, 2001**. Expressing his good wishes, he admired the valuable public services rendered by H. M. Patel and had congratulated the university for associating his name with the Institute.

#### V. Reinventing the Agro Centre VVN:

The Agro Centre network had been earlier reviewed by two high level expert committees headed by Prof. M. L. Dantwala (1968) and Shri R. N. Paudwal (1984). These expert committees had appreciated the work done by the Centers and recommended measures for strengthening this network. Need for reviewing the work of Agro Centres was again felt around 2000, when a Planning Commission Committee questioned the need for AERC network. As a result two important developments followed. The Ministry of Agriculture had taken two important measures to serve this purpose.

First, S. M. Jharwel, Principal Adviser in the MoA took the initiative to compile and publish in two volumes -Glimpses of Agricultural Economy of India (2008) highlighting the main findings of studies undertaken by the Centers during 2000 to 2004. Although activities of the Centers during this period were somewhat curtailed due to ongoing review process, contributions contained in these volumes were widely acclaimed by the academics and policy makers. In his message to this publication, Dr. P. K. Mishra, then Secretary Agriculture, GOI had indicated that AERC would be entrusted with the task of reviewing and monitoring the performance of major flagship programmes of the Government of India being run for agriculture and allied sectors.

The Second important development was that the Planning Commission constituted a Technical Advisory Committee (TAC) under the Chairmanship of Dr. Abhijit Sen, Member, Planning Commission to reassess the role of AERC network (2006). The Ministry had accepted the recommendation made by this expert group to have a core staff of 15 persons (including the new post of full time Professor/Director) for each Centre.

Following this decision, the AERC, VVN had filled up all the posts on a priority basis within one year. Creation of the post of full time Director was perceived as a golden opportunity to rejuvenate the Centre. It was realized that if the Centre aspires to flourish on a long term basis, it has to make conscious and systematic efforts for reinventing itself. This note will be incomplete without recording the strenuous efforts made by the new Director Dr. S. S. Kalamkar and his young team to reinvent AERC, VVN. The Centre was able to take several initiatives in



this direction because the Vice-Chancellor, Dr Harish Padh, himself a scientist of international repute, fully backed these efforts. Some of the major initiatives taken may be highlighted here.

- A) An upgraded website of the Centre ([www.aercspu.ac.in](http://www.aercspu.ac.in)) was launched on 1<sup>st</sup> July, 2013 ó by Dr. Sudarshan Iyengar, Vice Chancellor of Gujarat Vidyapeeth. Entire infrastructure facilities available in the Centre have also been upgraded. A modern well equipped Seminar Hall was inaugurated by the Vice Chancellor Dr. Harish Padh on 28<sup>th</sup> January 2013. Each research worker has been provided with a computer, printer and internet connectivity. Library facilities have been upgraded and automation is in advanced stage to scan all AERC reports.
- B) Concerted efforts have been made to enrich the academic environment in the Centre and the Department of Economics.
1. The Centre has, jointly with ISEC Bangalore, undertaken an evaluation study of *Rashtriya Krishi Vikas Yojna* (RKVY) in Gujarat and Rajasthan. Another study on the evaluation of check dam, entrusted by the GOG, has been undertaken jointly with the Department of Economics of SPU. The Centre is completing a major study entrusted by DES, GOG (involving around 2000 households) on estimation of changes in income and cost of production owing to changes in inputs and hybrid seeds for major crops of Gujarat.

2. Some faculty members have been recognized as Ph. D. guides. Faculty is encouraged to undertake teaching work and supported to attend seminars and conferences.
3. The Centre is regularly celebrating its Foundation Day on 1<sup>st</sup> July by inviting eminent scholars to deliver lectures. In this series, Dr. Sudardshan Iyengar gave a talk on "Agro-Economic Research Centre: Need to Introduce Fresh Agenda" (2013) and Dr. Tushaar Shah on "Secret of Creating High Performing Knowledge Institutions" (2014).
4. In order to encourage young scholars to strive for excellence, a new lecture series on "Shaping a Research Worker: My Experience" - has been launched. Dr Tushaar Shah (2013) and Prof. V. S. Vyas (2014) shared their valuable experience under this programme for the benefit of faculty members of the Agro Centre and Department of Economics.
5. With the creation of the post of full time Director in AERC, it was necessary to establish some linkages through which AERC/Department can continue to work together. The Sardar Patel University was good enough to accept my proposal to establish H. M. Patel Memorial Fund for which I had made a modest donation of Rs. 1 lakh as seed money. With this fund, the university has recently instituted H. M. Patel Memorial Lecture series to be jointly organized by the Centre and Department. First lecture under this series

was delivered by Hasmukh Shah on 'Independent India: Good Governance ó Aspirations and Reality' (2014).

6. A Faculty Seminar Series and a Working Paper Series have also been launched. The Centre and Department have accepted an excellent suggestion made by Dr. Tushaar Shah to organize a monthly seminar series in collaboration with the International Water Management Institute (IWMI). This seminar series, open for all interested academics, is intended to enrich the academic environment in the university campus.
7. Annual two day training programmes for field workers of the Cost of Cultivation Scheme (CCS) are regularly organized at Vallabh Vidyanagar.
8. The Centre also has on its agenda a programme to introduce a 'Course on Economic Analysis and Report Writing' for young researchers.
9. A National Workshop involving all the universities associated with the Cost of Cultivation Scheme (CCS) was organized during 21-22 August 2014.
10. The Centre will be organizing in the first week of December, 2014 the 28<sup>th</sup> National Conference of the Indian Society of Agricultural Marketing. This event will be organized under the auspices of the Sardar Patel University and Anand Agriculture University. The 45<sup>th</sup> Annual Conference of the Gujarat Economic

Association will be organized by the Centre in February, 2015.

11. A two day seminar on 'Water Management in India: Special Focus on Western India' to be jointly organized with the International Water Management Institute (IWMI), is also in the pipe line.

The above account clearly reflects the high level of motivation with which the Centre has been working to celebrate its Golden Jubilee period. However, the exhilaration generated by this festive spirit is mixed with anxiety as the GOI has taken a decision to discontinue providing its financial support to Agro Centers beyond the 12<sup>th</sup> Plan (2016-17). The suggested alternative of replacing such a dedicated and cost effective AERC network by an adhoc and uncertain system of competitive bidding may prove counter-productive and hence may not be advisable. The existing arrangement for the Agro Centre ó sponsored by the GOI and association with a university system-ensures credibility for this network and, therefore, needs to be preserved.

In retrospect, when one looks back at the record of Agro Centre network over the past five decades many knowledgeable experts, including the three high level expert committees constituted by the GOI, have found their overall performance quite creditable. In fact, the latest high level expert committee headed by Dr. Abhijit Sen (2006) has considered AERC Centers /Units as 'unique institutions with all India coverage and experience of about 50 years.' This expert committee had

concluded that, if this system is closed down, no other agency in the country ó Governmental or Non-Governmental ó can fill up the gap in providing unbiased information to the government in a professional manner. The loss will, therefore, be incalculable and irreversible. It had, therefore, stressed the need for strengthening this network. As a result, one expected this network to take off and flourish with a bright future. Paradoxically this network is heading for an anti-climax. One only hopes that wiser counsels would prevail and both the Directorate of the MOA and concerned universities will make positive efforts to enable this network to flourish.

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#### List of Research Studies/Reports Completed by AERC, VVN

1. A Study of Wheat Prices in the States of Gujarat and Rajasthan, by V. S. Vyas, 1963.
2. The Organization and Disintegration of a Collective Farming Society: A Case Study of a Gramdan Village, by K. M. Choudhary, July, 1966.
3. Economics of Well Irrigation in a Rajasthan Village, by K. R. Rakhral, published as an article in Artha-Vikas, January 1967.
4. Agricultural Labour in Four Indian Villages, Ed. by V. S. Vyas, May, 1964.
5. Command Area of the Dantiwada Project (Socio-Economic Survey of Three Banaskantha Villages in Gujarat), by B. M. Desai, November, 1964.
6. Working of Fair Price Shops in Gujarat and Rajasthan (with Special Reference to Ahmedabad and Jaipur Cities), by R. M. Patel, March, 1965.
7. A Study of Pilot Co-operative Farming Societies in Gujarat and Rajasthan by M. D. Desai and K. S. Karanth, December, 1964.
8. Factors Affecting Marketable Surplus and Marketed Supplies (A Study in Two Regions of Gujarat and Rajasthan) by V. S. Vyas & M. H. Maharaja, January, 1966.
9. Factors Affecting Acceptance of Improved Agricultural Practices (A Study in an I. A. D. P. District in Rajasthan), by K. M. Choudhary, November, 1965.
10. Economics of Cotton Cultivation (A Study in a selected region of Sabarkantha District of Gujarat), by M. H. Maharaja, May, 1966.
11. Economic Survey of Borsad Taluka (Gujarat State) with Special Reference to the Impact of Community Development Programme by M. L. Bhat, December, 1966.

12. An Evaluation of Some Aspects of Hybrid Maize Programme in Dahod Taluka (Panchmahal District, Gujarat), by B. M. Desai, January, 1967.
13. An Assessment of Co-operative Farming Societies in Gujarat and Rajasthan (A few Case Studies), by K. M. Choudhary, M. T. Bapat, N. R. Shah, D. P. Gupta, K.R. Pichholiya and S.B. Saxena, August, 1967.
14. An Enquiry into the Implementation of Farm Plans in Bardoli Taluka (A Study in an I.A.D.P. District in Gujarat) by V.S. Dharap and M. H. Maharaja, August, 1967.
15. New Strategy of Agricultural Development in Operation (A Case Study of the Kaira District in Gujarat), by B. M. Desai and M. D. Desai, July, 1968.
16. Conditions of Stability and Growth in Arid Agriculture, by N. S. Jodha and V. S. Vyas, December, 1968.
17. Significance of the New Strategy of Agricultural Development for Small Farmers: A Cross-sectional Study of Two Areas, by V.S. Vyas, D.S. Tyagi and V. N. Misra, January, 1969.
18. A Study of the Hybrid Bajra Programme in the Kaira District, Gujarat (Summer 1967-68), by N.R. Shah, June, 1969.
19. A Study of the Hybrid Bajra Programme in the Ahmedabad District, Gujarat (Kharif, 1968-69), by V.S. Dharap, June, 1969.
20. Some Aspects of Long Term Agricultural Finance - A Study of Two Areas in Gujarat, by N.S. Jodha & M.L. Bhat, July, 1969.
21. A Study of High Yielding Varieties Programme in the Kota District, Rajasthan (Rabi 1968-69), by D.S. Tyagi and V.N. Misra, October, 1969.
22. Prospects and Problems of Dairy Development in a Desert Region (A Study in the Bikaner District of Rajasthan) by N.S. Jodha and K.M. Choudhary, March, 1970.
23. An Enquiry into the Working of Cooperative Credit Institutions (A Study in Bhilwara District in Rajasthan), by M.L. Bhat & N.R. Shah, July, 1971.
24. Economic Profile of Marginal Farmers and Labourers (A Study in the Borsad Taluka of Gujarat) by R.M. Patel, May, 1972.
25. Green Revolution and Problems of Marketing (A Study of Production and Marketing of Bajra in three Districts of Gujarat), by S. L. Bapna, July, 1972.
26. Some Aspects of Co-operative Short Term Agricultural Finance (A Study in Three Areas in Gujarat), by N.S. Jodha, March, 1973.
27. Integrated Dryland Agricultural Development Programme: A Case Study of the Rajkot Taluka in Gujarat (Rabi 1971-72), by H.F. Patel, April, 1973.
28. Economic and Social Implications of Green Revolution (A Case Study of the Kota District), by S.L. Bapna, May, 1973.
29. Drought Prone Area Programme : A Case Study of the Banaskantha District in Gujarat (Rabi 1971-72), by R.D. Sevak, May, 1973.
30. Saving and Investment in an Agriculturally Prosperous Area (A Study of Farmers in Surat District), 1969-70, by M.D. Desai, 1973. (Supplement) Employment, Income and Levels of Living of Agricultural Labourers (A Study in the Surat District, Gujarat), 1969-70, by M.D. Desai, 1974.
31. Consumption Pattern in Rural Gujarat: A Study of Four Villages in Anand Taluka, by V.C. Patel, August, 1973.
32. Drought Prone Area Programme: A Study of the Banaskantha District in Gujarat (Kharif 1972-73) by K.M. Choudhary and R. D. Sevak, October, 1973.
33. Saving and Investment in an Agriculturally Prosperous Area (A Study in the Kota District, Rajasthan), 1970-71, by S.L. Bapna and N.R. Shah, December, 1973.

34. Integrated Dryland Agricultural Development Programme: A Case Study of Rajkot Taluka in Gujarat, 1972-73, by R.M. Patel and H.F. Patel, May, 1974.
35. Saving and Investment in an Agriculturally Prosperous Area (A Case Study of the Surat District in Gujarat), 1970-71, by M.D. Desai, June, 1974.
36. Saving and Investment in an Agriculturally Prosperous Area (A Study in the Kota District, Rajasthan), 1971-72, by S.L. Bapna, October, 1974.
37. Employment Pattern in Rural Gujarat (A Study of Four Villages in the Anand Taluka), 1970-71, by V.C. Patel, R. Indu and Vilas P. Patel, January, 1975.
38. Drought Prone Area Programme : A Case Study of the Banaskantha District in Gujarat (Rabi & Summer 1972-73), by R.D. Sevak, March, 1975.
39. Employment Situation in Dry Agriculture: A Study in an IDAD Project Area (Rajkot Taluka, Gujarat), by H.F. Patel, April, 1975.
40. Saving and Investment in an Agriculturally Prosperous Area: A Case Study of the Surat District, 1971-72, by M. D. Desai, April, 1975.
41. Saving and Investment in an Agriculturally Prosperous Area (A Case Study in the Kota District, Rajasthan), 1972-73, by S.L. Bapna, May, 1975.
42. Levels of Agricultural Development in Tehsils of Rajasthan, by M. T. Pathak and M.D. Desai, August, 1975.
- 42a. Development of Agricultural in the Backward Regions of Gujarat: Facts and Issues, by Mahesh T. Pathak, Mahendra D. Desai and A.S. Charan, January, 1974.
43. Saving and Investment in an Agriculturally Prosperous Area: A Study in the Kota District, Rajasthan, 1970-71, 1972-73, General Report, by S.L. Bapna and Case Studies, by H.M. Verma, October, 1975.
44. A Study of Impact of Famine and Relief Measures in Gujarat and Rajasthan (with Special Reference to the Banaskantha & Barmer Districts), by K. M. Choudhary & M.T. Bapat, December, 1975.
45. An Economic Profile of the Kadana Irrigation Project and its Command Area, by D. M. Brahmbhatt, March, 1976.
46. Factors Affecting Milk Supply to Co-operative Dairies in Gujarat: A Study of Amul and Dudhsagar Dairies, by V.C. Patel & M.D. Desai, January, 1976.
47. Saving and Investment in an Agriculturally Prosperous Area (A Study in the Surat District, Gujarat) Combined Report 1969-70/1971-72, General Report by M.D. Desai and Case Studies, by A.D. Chauhan, July, 1976.
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49. Some Aspects of Agricultural Development in Gujarat (1949-50 - 1974-75) (A Review & Final Report), by Mahesh Pathak, M.D. Desai and H.F. Patel, April, 1977.
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52. Working of Farmers' Service Societies in Gujarat (Two Case Studies of Tribal Areas in Gujarat) by D.M. Brahmbhatt & M. T. Bapat, January, 1978.
53. Economic Relationship between Crop Farming and Dairying in a Developing Area: A PL-480 Micro-Level Study of South Gujarat, by A. S. Patel and N.S. Jodha, January, 1979.

54. Block Level Plan, Balasinor Taluka (Kheda District, Gujarat), by Mahesh Pathak and N.R. Shah, October, 1979.
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56. Block Level Plan, Thasra Taluka (Kheda District, Gujarat), by Mahesh Pathak and Navin R. Shah, September, 1981.
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59. Inter-District Variations in Agricultural Development in Gujarat (1949-50 to 1978-79), by Mahesh Pathak and H.F. Patel, August, 1982.
60. Soil Testing Service in Rajasthan, by R.D. Sevak, September, 1982.
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63. Production and Marketing of Mangoes in Gujarat, by D. M. Brahmbhatt, January, 1984.
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65. Economics of Dairy Enterprise in Gujarat (Sabarkantha District, Gujarat), by R.M. Patel, K.M. Choudhary, R.D. Sevak and V.D. Shah, September, 1985.
66. Social Forestry Programme in Rajasthan (with Special Reference to Dungarpur and Bharatpur Districts, Rajasthan), by D.M. Brahmbhatt, June, 1985.
67. Economics of Tubewell Irrigation in Gujarat, by Mahesh Pathak, A. S. Patel and H. F. Patel May, 1985.
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69. Groundnut Development Programme in Gujarat, by Navin R. Shah, July, 1986.
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72. Socio-Economic Profile of Action Research Programme Area in Mahi Kadana Irrigation Project, by D. M. Brahmbhatt, September, 1987.
73. Intensive Pulse Development Programme in Gujarat (Case Studies of Panchmahals and Bharuch Districts), by Madhukar Bapat, July, 1987.
74. Price Support Operations for Mustard Seed by NAFED in Rajasthan by Rajnarayan Indu, August, 1987.
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- Relationship between Wholesale prices, Retail prices, and details of contributing factors for the price difference of Onion in Gujarat
- Adoption of Recommended doses of Fertilizer on Soil Test basis by Farmers in Gujarat
- Impact of National Food Security Mission (NFSM) on input use, Production, Productivity and Income in Gujarat
- Identifying Cooperatively Developed, Under Developed and Least Developed States in India
- Socio-Economic Impact of Check Dam in Khambhat Area of Anand district
- Estimation of Changes in Income and Cost of Production owing to Changes in Inputs and Hybrid Seeds for major Crops of Gujarat
- Impact Evaluation of *Rashtriya Krishi Vikas Yojana*- Gujarat and Rajasthan (*partner institute-data collection work for ISEC Bangalore for*
- Agro-Economic Research for Agriculture Policy: Gujarat and Rajasthan Experience (1961-2013)
- Indicators of Agriculture sector for the state of Gujarat and Rajasthan.

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