Hospital autonomy in India: The experience of APVVP hospitals

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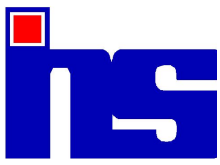

THE INSTITUTE OF HEALTH SYSTEMS

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Executive Summary

As part of its overall strategy of conducting policy-relevant research into matters that are likely to be of importance to government policy-makers and USAID missions in Africa, the Africa Bureau in USAID under its Health and Human Resources Analysis for Africa project commissioned the Data for Decision Making project (DDM) at Harvard University to conduct five case studies on hospital autonomy. One of these studies was done in India in the state of Andhra Pradesh.

The overall objectives of the DDM-HHRAA project on hospital autonomy are (a) to describe different approaches which have been taken in different parts of the world to improve performance of public hospitals through increased autonomy, and to improve allocative efficiency of government health spending by shifting public funds away from public hospitals; (b) to analyze factors which contribute to successful implementation of a strategy to increase hospital autonomy; and (c) to formulate a set of guidelines to support the design of policies to improve hospital performance through greater autonomy.

The primary goal of the present study of the experience of Andhra Pradesh Vaidya Vidhan Parishad (APVVP) hospitals with autonomy is thus to provide a description and assessment of the process and impact of autonomy on performance of these hospitals. More particularly, the objectives of the study are to (a) document and analyze the evolution of APVVP as an autonomous body; (b) describe the process and type of autonomy of APVVP; (c) describe the legal and administrative system supporting autonomy of APVVP; and (d) evaluate the impact of autonomy in terms of its effect on efficiency, quality of care, patient satisfaction, etc.

Located in South India, Andhra Pradesh (AP) is the fifth most populous state in India, and has a population size of 66.3 million. The health status of AP is marginally higher than the Indian national average. In 1992 AP recorded a birth rate of 24.1, death rate of 9.1, and infant mortality rate of 71 per 1000 live births, which compare favorably with the corresponding national figures of 29, 10 and 79 respectively. Life expectancy for AP in 1981-86 was 58 as compared to 56

for India as a whole. Only 40.8% of the births in AP took place in health institutions or were attended by health personnel, which is very close to the corresponding national figure of 41.2%. The decennial growth rate of AP population during 1981-91 of 24.2% compares closely with India's figure of 23.85%. At the same time, the total fertility rate of AP in 1988 at 3.3% was slightly less than that of 4% for the country as a whole.

The public health care system of Andhra Pradesh comprises three levels of service delivery and finance. Primary care services provide the people with preventive and promotive care for minor health problems, maternal and child health, and family planning. With the exception of family planning services that are managed by the Directorate of Family Welfare, all primary care services and facilities are managed by the Directorate of Health Services. The referral hospitals and secondary level hospitals make up the second level of public health care. These facilities provide in-patient and out-patient care for illnesses that are too complicated to be treated at the primary level. These facilities are under the general management of the Andhra Pradesh Vaidya Vidhana Parishad (APVVP), an autonomous governmental agency which was created in 1986. Tertiary hospitals, which include teaching hospitals, are the third and final level of public health system. Managed by the Directorate of Medical Education, the tertiary hospitals provide more technical and specialized care.

The Andhra Pradesh Vaidya Vidhan Parishad (APVVP) [translated: Andhra Pradesh Council for Hospital Management] is an autonomous body established in 1986 by an Act of Parliament with the express objective of managing all district hospitals in the state of Andhra Pradesh in India. The APVVP replaced the Department of Health, Government of Andhra Pradesh, in the management of the district hospitals. Motivated by a desire to grant greater (and eventually complete) autonomy to the district hospitals, APVVP was set up as a quasi-government organization with freedom to set its managerial objectives and style of functioning, subject to the overall mission of granting greater autonomy to district hospitals. At the same time, APVVP was entrusted with the task of ensuring greater efficiency of hospitals, improvement in quality of care and patient satisfaction, and improvement in financial sustainability and management. Starting with 140 district and community hospitals, APVVP soon took over all area hospitals as well, and by 1993 had 162 hospitals and 9646 beds.

The APVVP is governed by a "Governing Body", which comprises of (appointed) representatives from the government, (elected) representatives of the people, and representatives of the financial institutions.

The APVVP is headed by a Commissioner, who is supported by a number of Joint and Deputy Commissioners, and administrative and legal staff. A large number of physicians are also on the payroll of APVVP, and are principally located at the various district hospitals.

The model used by the Government of Andhra Pradesh to grant autonomy is based on creation of a parastatal organization and giving that organization autonomy, as distinct from giving autonomy to each and every hospital. APVVP effectively replaced that branch of the Department of Health that was entrusted with the administration of hospitals. However, there is no evidence to indicate that autonomy has percolated down to the level of the hospital. The delegation of financial and administrative powers to the hospital superintendents does provide them with some element of decision-making, but as compared to the overall size of hospital operations this delegation has not been quite insignificant.

This model has had many advantages. First, the government has had to deal with only one organization instead of 160 different autonomous hospitals. Second, the government has been able to effectively monitor flow of funds, appointments, staff remuneration, etc. fairly closely. Third, when this autonomous organization has worked under the general direction of a dynamic leader and supportive board, it has seemed to perform very well. Fourth, the fact that there is only one organization has effectively led to the system of one-window for all inputs, processes and outcomes.

At the same time, there are many disadvantages associated with a single organization. First, the hospitals continue to be non-autonomous, and thus the gains from autonomy may well not have been fully realized. Second, it has been easy, both administratively and politically, for the government to exercise a great deal of control over the single organization, so that the effective autonomy has been diluted in several instances. Third, the organization has experienced many periods of ineffective leadership, as a result of which the performance of all the hospitals has been less than optimal. As a result of all these factors, on several occasions and for long stretches of time APVVP has enjoyed little autonomy despite the legal and administrative framework provided by the Act. APVVP has not always been able to take independent decisions about its finances and day-to-day administration, and has often been tied down by bureaucratic and hierarchical constraints, that are usually typical of government organizations. While the legal framework for autonomy has been in existence since the earliest days of the organization, de facto autonomy has tended to be influenced by a host of factors including the

relative situation and strength of APVVP management vis-a-vis the government. In effect, the organization has often been only as autonomous as the management has been able to make it or as much as the government has permitted it to be, or some combination of both.

On the more positive side, APVVP has had commendable success in many managerial decision-making situations. Under APVVP the down-time due to equipment repair and overhaul came down from over six months in most cases to less than two weeks. This reduction in downtime on equipment has been the direct result of simplified and result-oriented policies on repairs and maintenance.

APVVP introduced several innovative ways of raising resources to augment funds it receives from the government. These include charging user fees, the Annadana schemes, donations, lotteries, and external assistance. User fees raised only Rs. 45 million (between 1988 and 1994). Donations proved to be highly successful, and raised substantial funds (over Rs. 100 million between 1988 and 1994) from the general public. The Annadana schemes also did well, and mobilized over Rs. 2 million (between 1988 and 1994) in the form of contributions from the general public toward the cost of food.

Probably the biggest achievement of APVVP has been the approval in 1993 by the World Bank for a loan of US$133 million for a special project that will help APVVP and the government of Andhra Pradesh finance activities that will strengthen institutions for policy development and implementation capacity, and improve quality, access, and effectiveness of health services at district area and community hospitals.

APVVP has taken many steps to improve the preparedness of hospitals to meet emergency situations. These include identification and improving availability of equipment required for emergency services, like oxygen cylinders, suction apparatus and refrigerators. When APVVP took over the hospitals, a large number of facilities did not have adequately functioning water supply systems. APVVP improved water supply in all 162 hospitals by installing borewells, augmenting municipal sources, overhauling existing water distribution systems, adding overhead storage tanks, and providing safe drinking water for patients. APVVP also adopted a multi-pronged strategy to address power shortages, and installed direct feeder lines and standby generator sets, changed the electrical wiring in old hospitals, and provided adequate number of fans to each hospital. Moreover, APVVP constructed several additional wards, outpatients centers, rooms for diagnostic services, and areas for patients' attendants.

APVVP has taken many innovative steps to manage and control funds at its dispos-

al. First, APVVP reorganized the classification of expenses to follow a more functional categorization. Second, APVVP created a concurrent audit system and an internal audit wing. Finally, APVVP delegated a number of financial powers to the hospital superintendent and district coordinators, especially for minor and routine repairs. APVVP initiated several steps for effective inventory control. In the critical area of supply of drugs, APVVP introduced monthly central monitoring of stock for about 55 drugs. New rules and procedures were introduced, which required the purchasing officers to take the existing stock account before placing fresh orders, which restricted purchase of most items for one quarter at a time only. These improvements in financial and inventory management were slow to materialize, but once the changes were set in motion they proved to be very effective. The initial reluctance of the staff to change from their well-entrenched habits from government days was overcome over time and through a process of training, and better and more functional systems of book-keeping, accounting, record-keeping, inventory control, purchases, and computerization were put into place.

In many other cases the success of APVVP has been rather limited. Even though the pattern of government funding changed from line grants to block grants after autonomy, the government continues to retain substantial control over how funds were allocated. As a result, no major innovations and improvements in spending have happened as a result of autonomy. Even the planning and budgeting processes have not changed much, despite the formal autonomy that APVVP enjoys in this regard. Allocations to the different heads of account and expenditure continue to be made on a historical basis, and no long-term plans have been drawn up for any major changes in process or focus of the organization.

APVVP's autonomy vis-a-vis personnel matters has been rather limited, as a result of which the management has not had the flexibility of appointments and dismissals. With the exception of some rationalization of posts (256 posts were declared non-essential, and were abolished) no innovations have been brought about in creation and filling up of vacancies. APVVP continues to follow the earlier norms set by the government, that are the same for other hospitals directly managed by the government. No system of incentives has been put into place following autonomy, and despite the enunciation of a new corporate mission, there has been no change in attitudes and actions of the employees of the organization, to whom autonomy has not meant much.

In sum, it appears that because of its autonomous nature APVVP has been very successful in mobilizing institutional finance and resources from public. Autonomy has also been useful in ensuring gains on other fronts, like maintenance of equipment and buildings, and to some extent, quality of care. However, autonomy has meant little or nothing to the staff employed in the organization, and has not been accompanied by any incentives for those working in the organization.

1. Background

Public hospitals are an important part of health systems in developing countries, and depending on their capacity, act as first referral, secondary or last referral facilities. Generally responsible for 50 to 80 percent of recurrent government health sector expenditure in most developing countries (Barnum and Kutzin, 1993), these hospitals utilize nearly half of the total national health expenditure in many of these countries (Mills, 1990). Under the prevailing conditions of increasing health care costs, it is thus no surprise that "hospitals, as the main spenders within the healthcare system, are in the limelight" (Montoya-Aguilar, 1994). In a bid to find new resources to fund the high cost activities of the hospitals as well as to utilize existing resources more efficiently, governments in some developing countries have started giving varying degrees of autonomy to public hospitals in the hope that this would both reduce the financial burden of hospitals on governments and strengthen the efficiency and effectiveness of public hospitals.

As part of its overall strategy of conducting policy-relevant research into matters that are likely to be of importance to government policy-makers and USAID missions in Africa, USAID's Africa Bureau under its Health and Human Resources Analysis for Africa project commissioned the Data for Decision Making project (DDM) at Harvard University to conduct five case studies on hospital autonomy. One of these studies was done in India, in particular in the state of Andhra Pradesh, which was identified as one of the sites by a Technical Advisory Group (TAG) organized by DDM and USAID.

1.1 Goals and Objectives of the Study

The overall objectives of the DDM-HHRAA project on hospital autonomy are (a) to describe different approaches which have been taken in different parts of the world to improve performance of public hospitals through increased autonomy, and to improve allocative efficiency of government health spending by shifting public funds away from public hospitals; (b) to analyze factors which contribute to

successful implementation of a strategy to increase hospital autonomy; and (c) to formulate a set of guidelines to support the design of policies to improve hospital performance through greater autonomy.

The primary goal of the present study of the experience of Andhra Pradesh Vaidya Vidhan Parishad (APVVP) hospitals with autonomy is thus to provide a description and assessment of the process and impact of autonomy on performance of these hospitals. More particularly, the objectives of the study are:

A. Document and analyze the evolution of APVVP as an autonomous body.

B. Describe the process and type of autonomy of APVVP.

C. Describe the legal and administrative system supporting autonomy of APVVP.

D. Evaluate the impact of autonomy in terms of its effect on efficiency, quality of care, patient satisfaction, etc.

The rest of this report is organized as follows: The conceptual framework for autonomy that is used as the basis for this study is discussed in section 2. Descriptive information of the health system of Andhra Pradesh and of the Andhra Pradesh Vaidya Vidhan Parishad is provided in section 3. The evolution of APVVP as an autonomous body is described in section 4. The impact of autonomy on performance of the hospitals is analyzed in section 5, while section 6 contains a discussion of the conclusions that can be drawn from the experience of APVVP. The report ends with concluding remarks in section 7.

2. Autonomy: Concepts and Issues

Autonomy[1] refers to the quality or state of being self-governing. Selznick (1953) and Van de Ven Ferry (1980) define autonomy as "the degree to which an organization has power with respect to its environment", so that greater the power the organization has with respect to its organization, the more autonomy the organization enjoys. Holdaway, Knobbier, Hickson and Heron (1975) define autonomy as the "extent to which organizationally relevant decision-making is inside the organization", so that greater the extent of decision-making within the organization, greater is the level of autonomy.

An issue central to both these definitions is the interpretation of the boundary of an organization. Price and Mueller (1986) consider the boundary of an organization to be "determined by the extent to which organizational norms and sanctions are officially applicable". According to this definition, all individuals and entities who are subject to the organization's rules and procedures and sanctions are within the boundaries of the organization, while all others are outside the boundary. Hospital employees are therefore members of the organization they work in, while the patients are not.

Another issue central to the idea of autonomy is power. Power has often been defined as the "production of intended effects" by some persons on other persons (Wrong, 1970). Power is exercised only if it produces effects that are intended; an order given but not carried out, or carried out differently than intended, is not an order coming from a source of power. Though power may be exercised legitimately or illegitimately, only the legitimate use of power is considered to be authority (Weber).

Autonomy can be either global or dimensional[2]. An organization is said to have global autonomy if it has power concerning its environment. The environment in government organizations is often defined in terms of territorial boundaries. Also referred to in the literature as "horizontal" division of powers and decision-making between national, state and local levels of government, territorial division of powers may take many forms. The literature is not always

1/ Much of the discussion in this section can also be found in Chawla and Berman, 1995.

2/ Different researchers have used different dimensions in specifying autonomy. Hildebrand and Newbrander, in a study of policy options in the health sector in Pakistan, select the three domains of governance, management and financing to specify autonomy.

consistent in its use of terms (see, for instance, Bossert, 1995, Conyers, 1986, Faltas, 1982, Maxwell, 1995, Mills, 1991, Pescador, 1985, Rondinelli, 1981, Winkler, 1989), but it commonly distinguishes between deconcentration, devolution and delegation. Deconcentration, or the reorganization of authority in general, refers to the redistribution of some amount of administrative authority to lower levels in the hierarchy. Devolution "shifts responsibility and authority from the central offices of the Ministry [of health] to separate administrative structures still within the public administration (e.g., provinces, states, municipalities)" (Bossert, 1995). Delegation, or the reorganization of authority specific to functions, involves the transfer of decision making and management authority for particular functions to organizations which are not directly controlled by the central government ministries.

An organization is said to have dimensional autonomy if it has power with respect to types of decisions, such as supervisory establishment, hiring and firing, determination of new programs, making purchases, allocation of work among available personnel, financial budgets, and assignment of responsibilities. Also referred to in the literature as "vertical" division of power over specific functions, there can be varying degrees of dimensional autonomy within each level of territorial autonomy.

Autonomy can thus be conceptualized according to a two-level nested structure representing global autonomy or "degree", and dimensional autonomy, or "type" (see, for example, Chawla and Berman, Draft, 1995). The first level can be represented by a multi-dimensional matrix, where each "cell" in the matrix refers to type of autonomy, and the position of each cell refers to the degree and extent of autonomy. The two key variables that form the dimensions of this matrix are "territorial level" and power or "authority". Nested within each cell is another matrix that reflects the third key variable, "dimension", and measures function type on one axis and extent on the other. The type and degree of autonomy is thus characterized by the territorial level-authority-function combination, and is denoted by the attributes of the cell in the first level of nesting, the position of the cell in this matrix, and the attributes and position of the cell in the second level of nesting.

The first level of nesting in this conceptual framework reflects combinations of territorial control and authority. Territorial autonomy refers to the transfer of control, either in part or in full, from the national government to local government (or even non-government agents). On the one end of the territorial autonomy spectrum is the

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Stover, in developing a management-ownership matrix for the Philippines, adds ownership to make four domains in all. Maxwell (1995) concentrates on management functions and decisions that arise in that context, like evaluation of needs and demands, resources, and services provided.

system where all decisions are made at the level farthest from the organization; on the other end is the system where all decisions are taken at the institution-level. In between are systems where decision-making is shared along many levels.

Power, or authority to govern and manage, refers to the act of direction, control and regulation which influences or determines the goals and objectives of the organization and its operational policies. There is a variety of ways in which governance of hospitals can be organized and power and responsibility for direction and control

Table 2.1

Hospital Autonomy: Nesting Level 1

Territorial Authority		***National Government***	***State Government***	***Local Government***	***Non-Government or Private***
<---------- Global Continuum ---------->					
Centrally Controlled	Power	Base Case: Zero Autonomy			
High Supervision/ Control					
Low Supervision/ Control	Continuum				
Total Independence		High Autonomy	High Autonomy	High Autonomy	High Autonomy

vested. On the one end of the spectrum is the hospital that is governed and directed by the Ministry of Health. On the other end is the independently managed hospital. In between is an array of forms that organization of governance can take, and the extent and nature of autonomy varies with the position on the authority spectrum.

The matrix of the first level of nesting is presented in table 2.1.

Ignoring for the moment the second level of nesting, the cell in the top-left corner of the matrix denotes the base case of "zero-autonomy" and the cells in the last row the cases of "high-autonomy". The cells in between denote varying levels of autonomy along each territory-authority zero-one continuum.

The second level of nesting refers to the third key variable, function. Functional autonomy refers to the manner in which the hospital management makes day-to-day decisions about the operations of the various functional areas of the hospital. The chief functional areas include general administration, finance, including control over revenue and financial resources, and control of inputs, including hospital staff.

- *Administration* refers to the methods by which the hospital decides its goals and objectives, interacts with its environment, and establishes rules and procedures for intra-organizational interaction. Administrative autonomy therefore refers to the freedom and discretion the hospital enjoys in setting its own goals and objectives, and administrative practices of interaction with the state and community, as well as within the organization with its own staff and patients.
- *Finance* refers to the methods by which the hospital's revenues are generated and funds are disbursed. It includes the establishment and management of financial resources through recurrent and capital budgets, procurement of capital, financial controls, financial procedures, and the process of financial auditing. Financial independence therefore refers to the freedom to raise revenue and allocate expenditure, and to monitor and control one's finances.
- *Management of inputs* refers to the methods by which the hospital administers its personnel, equipment, drugs, and medical and non-medical supplies. Personnel include administrators, physicians, nurses, paramedical staff, and non-medical staff. Operations involving personnel include selection and recruitment, training, determination of wages and salaries, personnel records, discipline and discharge, post-retirement payments, and other staff related issues. The extent and nature of autonomy will depend on the hospital's freedom to choose its own policies with respect to all or some matters relating to personnel.

Table 2.2

Hospital Autonomy: Nesting Level 2

Degree ------> Function		***No Autonomy <----------> Full Autonomy***	
Administration		No Autonomy	Full Autonomy
Finance	Recurrent	No Autonomy	Full Autonomy
	Capital	No Autonomy	Full Autonomy
	Resources	No Autonomy	Full Autonomy
	Revenue	No Autonomy	Full Autonomy
Inputs	Personnel	No Autonomy	Full Autonomy
	Drugs	No Autonomy	Full Autonomy
	Equipment	No Autonomy	Full Autonomy
	Supplies	No Autonomy	Full Autonomy

There is a variety of ways in which functional autonomy can be organized, and table 2.2 presents an illustration. On the one end of the spectrum (first column of the matrix: zero autonomy) is the centrally directed and financed public hospital, with no administrative flexibility, and no power over finance, personnel, and procurement of supplies. On the other end (last column of the matrix: full autonomy) is the fully independent facility where the management has complete discretion over administration, finance, personnel matters, and procurement of supplies. In between is a vast array of forms that management can take, and the extent and nature of autonomy will depend on the type and degree of functional independence the management enjoys.

Clearly, a unit may enjoy any degree of autonomy along any one or along any combination of ownership, authority and function. Indeed, a considerable overlapping of degree and type of autonomy can be expected in practice. For instance, a hospital can be fully government-owned (zero-autonomy along ownership aspects), have considerable authority vested in the hospital administrator (between zero and one autonomy along authority organization aspects) and be fully financially independent in terms of freedom to raise and allocate

revenue (fully autonomous along finance-function aspect). Autonomy will therefore be defined by the ownership-authority-function combination, and where this combination lies in the various zero-one continuum. A unit may enjoy any degree of autonomy along any one or along any combination of territorial level, authority and function. Indeed, a considerable overlapping of degree and type of autonomy can be expected in practice.

The nature and extent of autonomy in Andhra Pradesh Vaidya Vidhan Parishad hospitals will be analyzed on the basis of the above framework.

3. Health Care System of Andhra Pradesh

Located in South India, Andhra Pradesh (AP) is spread over three geographic regions: Coastal Andhra, Rayalseema, and Telengana. As the fifth most populous state in India, it has a population size of 66.5 million. About 27% of its people live in urban areas, while 73% reside in rural areas. Thirty-eight percent of its people live below the official Government of India poverty line.

The health status of AP is marginally higher than the Indian national average. In 1993 AP recorded a birth rate of 24.1, death rate of 8.4, and infant mortality rate of 64 per 1000 live births, which compare favorably with the corresponding national figures of 28.5, 9.2 and 74 respectively (SRS Bulletin 1994). Life expectancy for AP in 1981-86 was 58 as compared to 56 for India as a whole (Health Information of India, 1992). Only 61.7% of the births in AP took place in health institutions or were attended by health personnel, which is very close to the corresponding national figure of 47.3%. The decennial growth rate of AP population during 1981-91 of 24.2% compares closely with India's figure of 23.85% (Census of India 1991). At the same time, the total fertility rate of AP in 1992 at 2.8% was slightly less than that of 3.6% for the country as a whole.

Several socio-economic variables are known to have an impact on health status. AP is one of the poorest states in the country, and has a large proportion of population living below the poverty line. Literacy rate is also significantly lower in AP as compared with the national average. Most of the other commonly used indicators of development are, however, quite similar for both AP and the country as a whole.

The most common causes of deaths in AP are nervous and circulatory system disorders (20%), respiratory disorders (16%), maternity and infancy related causes (11%), accidents and injuries (10%), digestive disorders (7%), and various types of fevers (6%). Records from primary health centers (PHCs) show that common illnesses treated were respiratory infections, malaria, alimentary diseases, and aches and pains. Gastroenteritis, respiratory infection,

malaria, scabies, and skin infections are among the most frequently treated diseases among children.

According to the national sample survey (NSS) utilization data from the 42nd round (1993), most households (98%) utilize the modern (allopathic) system of medicine for both hospitalization and ambulatory care regardless of their income level or social class. Private sector is utilized more frequently for outpatient care, with rural areas of AP recording a higher utilization (74.91% of all outpatient cases) as compared to urban areas (71.9%). As far as inpatient treatment is concerned, approximately 67% of all inpatient cases are treated in private health institutions. Public health care utilization is thus not very high for both inpatient as well as outpatient care, which is contrary to the national picture (59.7% of all outpatient and 60% of all inpatient cases treated in public hospitals).

Table 3.1

Health Indicators of Andhra Pradesh and India, 1993

Indicators	*Rural*		*Combined*		*Urban*	
	AP	*India*	*AP*	*India*	*AP*	*India*
Annual Birth Rate per 1000 Population	24.3	30.3	23.4	23.5	24.1	28.5
Annual Death Rate per 1000	9.5	10.5	5.4	5.7	8.4	9.2
Infant Mortality Rate per 1000 Live Births	70	82	46	45	64	74
Estimated Death Rates for Children (<4 years)	29.5	35.7	17.9	18.7	27	33.3
Life Expectancy (1981-86)	59	54	58	59	58	56
Attended Births (in%) by Qualified Personnel	51.9	39.8	87.6	82.8	61.7	47.3
Decennial Growth Rate (1981-91)	18.4	20.1	43.2	34.5	24.2	23.9
Total Fertility Rate (1988)	2.9	3.9	2.3	2.6	2.8	3.6

Sources:

1. Registrar General of India, Ministry of Home Affairs, Government of India, Sample Registration System(SRS), 1988.

2. Registrar General of India, Ministry of Home Affairs, Government of India. Sample Registration Bulletin, Vol. XXVIII No:1 Jan 1994.

3. Census of India 1991, Series-1 Paper -2, 1992 Final Population Totals: Brief Analysis Primary Census Abstract.

4. Health Information of India 1992.

Table 3.2

Socio-Economic Indicators: Andhra Pradesh and India

Socio-Economic Indicators	***AP***	***India***
Real Per Capita Income (Rs, 1992-93; US$1=Rs.35)	1,829	2,219
CMIE 's Relative Index of Development (1992-93)	99	100
CMIE's Index of Infrastructural Development (1992-93)	103	100
%Non-Agricultural Workers in Labor Force (1981)	31.39	35.15
% Urbanization (1991)	26.89	26.13
Rate of Literacy (1991)	44.09	52.09
Rate of Female Literacy(1991)	32.72	39.19

Source: Center for Monitoring Indian Economy (CMIE), Bombay: "Basic Statistics, States", 1994.

3.1 The Public Health Care System

The public health care system of Andhra Pradesh comprises three levels of service delivery and finance. Primary care services provide the people with preventive and promotive care for minor health problems, maternal and child health, and family planning. With the exception of family planning services that are managed by the Directorate of Family Welfare, all primary care services and facilities are managed by the Directorate of Health Services. The referral hospitals and secondary level hospitals make up the second level of public health care. These facilities provide in-patient and out-patient care for illnesses that are too complicated to be treated at the primary level. These facilities are under the general management of the Andhra Pradesh Vaidya Vidhana Parishad (APVVP), an autonomous governmental agency which was created in 1986. Tertiary hospitals, which include teaching hospitals, are the third and final level of the public health system. Managed by the Directorate of Medical Education, the tertiary hospitals provide more technical and specialized care.

Apart from the directorates that manage the individual levels of the public health system, there are five smaller directorates that manage the AIDS program, preventive medicine, employees state insurance, and the Indian system of medicine and drug control. The Department of Health, Medical, and Family Welfare oversees the functions and operations of all directorates.

Table 3.3

Private and Voluntary Hospitals & Nursing Homes in Andhra Pradesh

	District	***Private Hospitals***	***Beds***	***Voluntary Hospitals***	***Beds***
1	Srikakulam	56	500	1	40
2	Vijayanagaram	18	83	0	0
3	Vishakapatnam	107	1,602	2	160
4	East Godavari	320	4,582	3	404
5	West Godavari	357	4,297	0	0
6	Krishna	468	4,464	8	808
7	Guntur	304	4,684	8	867
8	Prakasam	156	2,541	1	100
9	Nellore	189	2,957	3	315
10	Chittoor	130	1,349	5	525
11	Cuddapah	60	939	3	313
12	Ananthapur	38	479	1	0
13	Kurnool	32	783	4	135
14	Mahaboobnagar	69	980	2	90
15	Rangareddy	103	1,381	1	42
16	Hyderabad	250	8,864	0	0
17	Medak	52	651	0	0
18	Nizamabad	68	1,111	2	40
19	Adilabad	26	446	1	25
20	Karimnagar	149	1,553	3	210
21	Warangal	51	1,077	2	97
22	Khammam	127	1,471	1	110
23	Nalgonda	87	1,177	3	124
	Total	3,217	47,971	54	4,405

According to 1994 statistics, the public health infrastructure of Andhra Pradesh comprised 10,568 subcenters, 1,306 primary health centers, 175 community health centers, and 45 mobile units at the primary level. At the secondary level there are 172 hospitals and dispensaries, of which 74 are community hospitals, 47 area hospitals, 21 district hospitals, 7 maternal and child health hospitals, 1 paediatric hospital and 22 dispensaries. Community hospitals have 30 to 50 beds and are located in rural areas. Area hospitals are located in smaller towns, and have 100 beds. District hospitals are larger, with 200 or more beds, and are located in district headquarters. All dispensaries are situated in urban areas. At the tertiary level, there are 38 tertiary hospitals affiliated with 9 medical schools, and 2 super-specialized hospitals. In addition to these facilities, there are 23 district tuberculosis centers, 25 tuberculosis clinics, and 194 leprosy control units at the primary and secondary levels.

In the near-complete absence of user-charges, the public healthcare system depends almost entirely on government funding provided via budgetary support. However, macroeconomic difficulties and budgetary constraints have led to a general decline in government's allocation of funds to the public healthcare system. In real terms, public health care spending in AP has fallen from 6.8% of total state revenue in 1981 to 5.6% in 1991, which represents a meager 1.3% of the state's Net Domestic Product. Within the healthcare system also, the allocation of funds has changed over the past 10 years. While health care expenditure allocated to primary health care has increased from 46% to 49% between 1981 and 1991, funding to hospital services has declined from 41% of total health budget to 34%. Out of the amount that is allocated to hospital care, most of it goes to tertiary care, leaving secondary care with very little resources. Although the Indian Planning Commission suggests a ratio of 67:33 for allocation to non-tertiary (primary and secondary) and tertiary care, the current AP figures are more to the order of 51:49. With only 32% of its public hospital beds in the secondary level, AP public health system does not even meet half of the Indian Planning Commission norms of having 70% of all public hospital beds at the secondary level.

The allocation of hospital funds within the various operational categories further exacerbates the shortages and inefficiencies. Almost 71% of total available funds are used to finance salaries, leaving very little for maintenance and operations. Moreover, salaries have been growing at a rate over 10%, while other costs

have experienced a moderate growth of around 5%. As a result, there exists a perennial deficiency of funds for non-salary recurrent costs. Budgetary allocation for operations and maintenance of existing infrastructure has fallen from 30% to less than 20% during the period 1971-1991. The situation is not improved by the resulting shortage of diagnostic facilities, repair and maintenance service for equipments, transport facilities, and trained personnel, as a result of which the public healthcare system leaves much to be desired.

The pressing need for reform led the government of AP to reconsider the structure and management of the public healthcare system, and the APVVP was born. Recognizing that "the standard of hospital services and maintenance of hospital equipment was far from satisfactory, and that the budgetary allocation was meager and government could not raise [additional] resources" the government decided that "an autonomous body would be able to augment resources by mobilizing donations, charging fees for diagnostic and treatment services, through paying wards and through commercial projects." (from the speech of the Minister of Health before the state legislature, as reported in Deccan Chronicle, Hyderabad, 28 July, 1986).

Table 3.4

Growth of APVVP

Year	*Hospitals*	*Beds*
1987-88	140	8426
1988-89	140	8556
1989-90	141	8593
1990-91	143	8951
1991-92	161	9586
1992-93	162	9646

Starting with 140 district and community hospitals, APVVP soon took over all area hospitals as well, and by 1993 had 162 hospitals and 9646 beds.

3.2 The Organization: Andhra Pradesh Vaidya Vidhan Parishad (APVVP)

The Andhra Pradesh Vaidya Vidhan Parishad (APVVP) [translated: Andhra Pradesh Council for Hospital Management] is an autonomous body established in 1986 by an Act of Andhra Pradesh legislature with the express objective of managing all district hospitals in the state of Andhra Pradesh in India. The headquarters of APVVP are at Hyderabad. The APVVP replaced the Department of Health, Government of Andhra Pradesh, in the management of the district hospitals. Motivated by a desire to grant greater (and eventually complete) autonomy to the district hospitals, APVVP was set up as a quasi-government organization with freedom to set its managerial objectives and style of functioning, subject to the overall mission of granting greater autonomy to district hospitals. At the same time, the APVVP was entrusted with the task of ensuring greater efficiency of hospitals, improvement in quality of care and patient satisfaction, and improvement in financial sustainability and management.

The APVVP is governed by a "Governing Body", which comprises (appointed) representatives from the government, (elected) representatives of the people, and representatives of the financial institutions. The APVVP is headed by a Commissioner, who has his offices at the headquarters in Hyderabad. The Commissioner is supported by a number of Joint Commissioners and Deputy Commissioners, and administrative and legal staff. A large number of physicians are also on the payroll of APVVP, and are principally located at the various district hospitals.

The functions entrusted to APVVP are as follows:

1. Formulate and implement the schemes for the comprehensive development of the dispensaries and hospitals.

2. Construct and maintain dispensaries and non-teaching hospitals.

3. Purchase, maintain and allocate quality equipment to various dispensaries and hospitals.

4. Procure, stock and distribute drugs, diet, linen and other consumable among the dispensaries and hospitals.

5. Provide facilities of specialists and super-specialists in various

hospitals.

6. Receive donations, funds, and the like from the general public and institutions both from within and outside India.

7. Receive grants or contributions which may be made by the government.

8. Provide for construction of houses for employees of the dispensaries and hospitals and the maintenance thereof.

9. Plan, construct and maintain commercial complexes, and paying wards; provide diagnostic services and treatment on payment basis and utilize the receipts for the improvement of hospitals and dispensaries.

10. Manage public utility services and any other activity of commercial nature within the hospital premises.

11. Manage canteens and cafeteria within the hospital premises.

Legal Framework of the Commissionerate

The Commissionerate has been established as a body corporate, having perpetual succession and a common seal, with the power to acquire, hold and dispose of property and enter into contracts.

The Commissioner is appointed by the state government and is the Chief Executive of the Commissionerate. The Governing Body of the Parishad is its principal policy making body, and has powers to:

1. Make regulations to achieve the objectives of the Act;

2. Hold, control and administer the properties of the Commissionerate;

3. Administer funds, accept donations, endowments, bequests, grants, transfer of movable and immovable property on behalf of the Commissionerate;

4. Raise loans from central or any other government, the public or any other financial institution;

5. Levy and collect such fees as may be prescribed for various specific services;

6. Purchase, stock manufacture and distribute drugs, linen and other consumables;

7. Enter into an agreement with the Central or State government or with a private management for assuming management of any dispensary or hospital and for taking over its properties and liabilities or for any other purpose of the Act;

8. Purchase, maintain and allocate quality equipment to various dispensaries and hospitals; and

9. Constitute committees of professional experts to advise on strategies for improvement of medical care facilities.

Financial Powers of the Commissionerate

In addition to the grants-in-aid from the State Government and other grants from the Central Government, APVVP is empowered by the Act to mobilize resource by taking loans and by charging for services provided. Under clause 5 (i) of the bill, APVVP can "plan, construct and maintain commercial complexes, paying wards and provide diagnostic services and treatment on payment basis and utilize the receipts for the improvement of hospitals and dispensaries".

Powers of the Government

APVVP is expected to function under the "general supervisory control" of the government, who has the powers to review and inspect the affairs and properties of the Commissionerate, its buildings, laboratories, libraries, equipment maintained by the dispensaries, hospitals, medical institutions, etc., and to enquire into related matters of the Commissionerate, if required. All rules made under the Act are required to be placed before the Legislative Assembly of the state. In the event of any dispute between the government and the Commissionerate as to whether a matter is of concern to state purposes, or warrants state intervention, the decision of the government overrides.

4. Evolution of APVVP as an Autonomous Organization

A day before the introduction of the APVVP bill in the Andhra Pradesh Legislative Assembly,[3] the then Chief Minister Mr. N.T. Rama Rao (TDP), inaugurated a seminar on “Preventive Care Medicine Update, 1986” organized by the Telugu Association of North America (TANA), the Department of Medical & Health Services, A.P, and Nizams Institute of Medical Sciences. The Chief Minister said that “the government had taken steps to decentralize the medical set-up in the state with a view to make it free from government interference, while providing improved medical facilities to the poor and needy." The government, he said, was going to create a three-tier structure in health care under which the Commissionerate of Medical Services (APVVP) would be constituted and would be in charge of all the Taluk and District hospitals. The primary health centers would be under the Directorate of Health, while medical education would be looked after by a Medical University. The Chief Minister also said that under the present circumstances it was not the well-equipped urban areas which needed medical care, but the rural ones which were even bereft of primary services. "Upliftment of rural areas, particularly in the health sector, was the need of the hour.” (News Time, July 25, 1986).

The bill constituting the APVVP was introduced in the Andhra Pradesh Legislative Assembly on 26th July 1986. In the statement of objectives of the then Health Minister, MSS Koteshwara Rao (TDP), stated “the standard of maintenance of hospitals, equipment, services etc. was far from satisfactory as the budgetary allocation was meager and government could not raise resources from outsiders. An autonomous body would be able to augment resources by mobilizing donations, charging fees for diagnostic and treatment services, through paying wards and through commercial projects”. The Health Minister argued that the bill would provide better medical care and efficient functioning of hospitals and medical colleges, as “[APVVP] would help augment resources by loans from financial institutions and through donations for providing better medical and health facilities.”

3/ A bill for introducing a new legislation on subjects covered by the state list is first presented in the legislative assembly of the concerned state. After a clause by clause consideration, the bill is put to vote. If the house passes the bill, and the Governor’s assent is obtained, the bill becomes an Act.

In course of the discussion, members of the assembly expressed their views on a wide range of issues, including user charges, resource generation, the 'sad' condition of public hospitals, advantages and disadvantages of separating preventive, curative, and tertiary care, quality of drugs and equipment, the need for appointing hospital administrators, continuing government control over APVVP, the personnel policies of APVVP, the appropriateness of having commercial complexes near the hospitals, etc. Most of the discussion was along predictable bipartisan lines, with the members questioning the very basis of such a bill, arguing that merely introducing a bill to bifurcate secondary care would not improve the condition of public hospitals. They also argued that the APVVP bill, like the earlier bills on Commissionerate for Higher Education and University of Health Sciences, was in fact trying to centralize powers rather than decentralize it.

4.1 Specific Issues

User Charges

Clause 5 (i) of the bill allows APVVP "to plan, construct and maintain commercial complexes, paying wards and providing diagnostic services and treatment on payment basis and utilize the receipts for the improvement of hospitals and dispensaries" and was at the center of the discussion. Several members of the opposition parties were of the view that this clause would in fact be used to charge fees from poor patients, while the Minister of Health and members from the treasury benches explained that the intention was only to charge the rich patients in the paying wards. Opposition members countered that this was not explicitly mentioned in the bill, and the Speaker ruled that this was in fact a defect in the drafting of the bill.

Resource Generation

Some members of the opposition were of the view that the bill addressed commercial and business interests only. They doubted that anyone would come forward to donate money to the Commissionerate. One member[4] argued that "corporations such as the APVVP are formed only to get loans from central institutions and the World Bank" and that "constituting a Commissionerate to do [this] for health care seemed like constituting a business organization." A member from the majority party[5] countered by welcoming the idea of seeking loans from financial institutions to become self sufficient, and

4/ A. Dharma Rao (Cong-I)

5/ K.R Pushpa Raju (TDP)

of having commercial complexes near hospitals which "would also make use of the waste land in hospital complexes and ward off animals from entering the complexes." Opposition members, however, were not satisfied with these explanations, contending that shopping complexes would actually "spoil the beauty of the hospital compounds." The then Health Minister explained that the government could not take loans from any financial institution whereas an autonomous corporation could. He also clarified that the proposed commercial complexes would not be "vegetable markets or slaughter houses, or restaurants with bars. The appropriate nature of commercial units will be decided by the Governing Council, that would have responsible people on it. These complexes would not be allowed to spoil the sanitation of the hospital surroundings also." Some useful stalls and services would include auto-rickshaw stands, drug stores, fruit juice bars, etc.

Was the Commissionerate Needed?

Several members brought out the sad state of affairs in the public hospitals and wondered whether the Commissionerate was going to make any difference at all. In the words of an opposition member[6], "if we see the condition of hospitals in rural areas, it is horrible with no doctors, medicines, vaccines or injections. And day by day the incidence of malaria and filariasis are increasing." Another[7] was of the opinion that "already we have the Directorate and the Secretariat. Even after having the Directorate and the Secretariat the condition of the public hospitals in rural areas remains deplorable, with rampant corruption and misuse and with no doctors in place. No new developmental changes would take place with the Commissionerate."

Bifurcation of Curative and Preventive Care

Some members[8] welcomed the bill as it provided for bifurcation of preventive, curative and tertiary care. They felt that this would lead to improvements in administrative efficiency since the three-way division into University of Health Sciences, APVVP and the Directorate of Health would permit decisions being taken closer to locations. "Files of these branches of health administration would no longer be brought to the Secretariat for decision-making, as each of these units would be empowered with a wide range of decision-making powers." They further argued that health administration was looked after by such autonomous commissionerates and corporations in several other countries also.

6/ S. Raghava Reddy (CPI-M)

7/ C. H.Vittal Reddy (CPI)

8/ K R Pushpa Raju (TDP) and Dr. K Veeraiah (TDP)

Quality of Drugs and Equipment

A member of the ruling party[9] pointed out that the creation of APVVP would lead to better quality of drugs and improvements in the purchasing system. Several other members[10], particularly from the opposition parties, remained unconvinced. They maintained that even though the Act provided for self purchase of drugs, there was no mechanism to ensure that this would lead to definite improvements in quality or procedure, and that the benefits of this system would in fact percolate to the people. In support of this argument, they cited the example of government hospitals where, they alleged, whatever drugs were available were sold off by the hospital staff.

Members[11] were keen to know about the new equipment that would be made available in the APVVP hospitals. The Minister of Health pointed out that under the existing resource constraint, the government was not in a position to provide sophisticated equipment, like ultrasonography, in the district hospitals even though it was very useful in diagnosing various gynecological diseases. However, with improvements in resource mobilization as was expected under APVVP, it was expected that such equipment would become available at all hospitals.

Government Control

Several members pointed out that though APVVP was constituted as an autonomous body, the government still enjoyed considerable powers in day-to-day administration. Section 21(1) of the Act says "in the discharge of its functions under this Act the Commissionerate shall be guided by such directions on questions of policy relating to State purposes or in the case of any emergency given to it by the government. Section 21(2) states "if any dispute arose between the government and the Commissionerate as to whether the question is or is not a question of policy relating to state purposes or whether an emergency has arisen, the decision of the government thereon shall be final." Section 21(3) states "the Commissionerate shall function under the general supervision of the government and the government shall have the power to review the actions of the Commissionerate taken under the Act." Under section 22, the government shall have "the right to cause an inspection to be made by such persons [as they may direct] of the affairs and properties of the Commissionerate, its buildings, laboratories, libraries, equipment maintained by the dispensaries, hospitals, medical institutions, and also cause an

9/ M. Indira (TDP)

10/ C.Jayaram Babu (Cong-I)

11/ Dr. R. Ravindranath Reddy (BJP)

enquiry to be made into matters connected with the Commissionerate." Finally, under section 23(2), all rules made under the Act are required to be placed before the Legislative Assembly of the state.

Several members[12] feared that these clauses would nullify autonomy itself and were of the view that the government was only creating a middle level agency and had kept all the powers with itself. Such an agency, they argued, would only increase corruption and inefficiency.

Interest on Government Assets Transferred to APVVP

Section 18 of the Act requires the Commissionerate to pay interest on government assets vested in APVVP at the rates fixed by the government, and to treat such payments as an expenditure of the Commissionerate. Many members[13] protested this clause, arguing that the Nizam kings had given these buildings to the government free of cost, and thus the government could not charge interest on these assets. The Minister of Health replied that the government had also built several hospitals, and was thus authorized to charge interest from APVVP, especially since APVVP would continue receiving substantial financial aid from the government.

Appropriateness of Having Assembly Members in the Governing Council

Some members[14] expressed doubts about the appropriateness of nominating assembly members to the Governing Council of the Commissionerate. They were of the view that this would introduce politics into APVVP, and that the doctors and other staff would be seeking out the Assembly members for their transfers. The Minister of Health argued that the members were "responsible, and would represent the interest of the people" and that they "would use sound judgement in the discharge of their duties".

Appointment of Hospital Administrators

Arguing that the hospital doctors could not perform the management task, members expressed an interest in having hospital administrators to manage the hospital affairs. One member[15] suggested that an officer of the rank of a Regional Development Officer should be appointed in large hospitals, and should have control over all doctors and other staff. He also felt that the Resident

12/ Vittal Reddy (CPI), A. Dharma Rao (Cong-I)

13/ S. Raghava Reddy (CPI-M)

14/ Dharma Rao (Cong-I), Jaya Ram Babu (Cong-I), G. Kuthuhalamma (Cong- I), P. Venketapathy (CPI-M)

Medical Officers who were supposed to hold this power had in fact proven their inability in this regard. According to him a doctor was unlikely to take action against another doctor, and the only way to discipline "erring government doctors was to have an administrative officer at the helm of affairs".

After this discussion and the Health Minister's clarifications to the members of the Legislative Assembly, the Act was passed as it was presented to the Assembly without any modifications.

4.2 Amendment to the APVVP Act

The APVVP Act 1986 was amended on 24th January 1987. While the original Act under Section 11(1-b-i) stated that "with effect from such date as may be prescribed the control and management of all the dispensaries, non-teaching hospitals, except such hospitals which are primarily dealing with implementation of National Health Programs like Tuberculosis Control and Leprosy Control shall stand transferred to and vest in the Commissionerate and shall function under the administrative control of the Commissionerate" and Section 11(1-c) stated that "all the properties, assets and liabilities, rights and obligations in relation to such dispensaries and non-teaching hospitals and all obligations of the Government in relation to them shall devolve upon the Commissionerate", the amendment substituted the words 'as may be prescribed' with 'as may be notified'. The implication of this change was that it made it mandatory for the Government to officially notify the date of application of the clause. This amendment was applicable to all the other subsections, and included those dealing with service conditions of the officers and employees who were previously working with other departments. It appears that this amendment was primarily made to remove ambiguities regarding the service conditions of employees.

Other amendments also dealt with service matters of officers and employees. Section 11 (1-a) of the original Act stated that "with effect from such date as may be prescribed, every officer or employee who immediately before that date was under the administrative control of the Director of Medical Education shall stand transferred to the Commissionerate and shall be deemed to be officer or employee of the Commissionerate." Section 11 (1-d) stated that "every officer or employee who immediately before that date that

15/ C.H. Jayaram Babu (Cong-I)

[prescribed date] was under the administrative control of such dispensaries, district headquarters hospitals, and non-teaching hospitals shall stand transferred to the Commissionerate and shall be deemed to be an officer or an employee of the Commissionerate." The 1987 amendment diluted the strong position of APVVP somewhat, and substituted the clauses 'transferred to' and 'be deemed to be an officer or employee of the Commissionerate' with 'every officer or employee who, immediately before that date, was working in such dispensaries and non-teaching hospitals shall continue to work on deputation with the Commissionerate till such time he exercises the option to be absorbed in the service of the Commissionerate'. The amendment therefore gave the employees the choice and freedom to opt for absorption in the service of the Commissionerate or to continue on deputation.

4.3 Change of Government

The Telegu Desam Party lost the 1989 Assembly elections to the Congress party, and all institutions created in the earlier regime, including the APVVP, came under immediate threat. The new Minister of Health, N. Srinivasulu Reddy (Cong-I), declared on July 20th 1990 that the State government had decided to abolish the Vaidya Vidhana Parishad by repealing the relevant Act, and that an ordinance would soon be issued to this effect.

Members of the TDP criticized the reported move of the State Government to abolish APVVP, and said that the new government "betrayed a lack of understanding" of the intentions of the earlier government and the Health Minister, and about the functions of APVVP and the background against which it was set up. They maintained that the Parishad actually helped in cutting down bureaucratic delays involved in getting sanctions from secretariat to district hospitals, for promotions, transfers, purchase and medical, constructions of new blocks and so on. Even the then Union Health Minister, Motilal Vora, and the then Health Secretary had studied the functioning of APVVP, and had encouraged other states also join in. ("Decision to Abolish Vaidya Vidhana Parishad Criticized", The Hindu, July 20th, 1990.)

A committee was set up on 15th January, 1990 under the Chairmanship of SR Rama Murthy, a senior officer of the Indian Administrative Service and advisor to the Chief Minister M. Chenna Reddy, to "examine the relevance and utility of the institutions and authorities set up, to ensure proper discharge of the functions with efficiency and economy."[16] Since APVVP was one such institution

16/ Report of the Committee on Administrative Reorganization (RCAR), General Administration (ART Desk) Department, Government of Andhra Pradesh, April 1990.

newly set up by the previous Telugu Desam regime it came under the purview of the Committee's terms of reference.

With regard to APVVP the committee observed "while APVVP has made some efforts to improve the maintenance standards, upgrade buildings and equipment with the plan and non-plan funds made available to it, it has not been very successful so far to raise large scale funds from financial institutions. However, it has mobilized additional resources from its paid services, public donations etc., to the tune of Rs. 3,263,000 during 1987-88 and Rs. 8,212,000 during 1988-89. By tapping public contributions and grants from other departments, the APVVP has undertaken new capital works of the order of Rs. 42,400,000 since its inception." It further noted that "APVVP has achieved considerable improvement in the supply of drugs and consumable, water supply and electricity, diagnostic services and emergency preparedness", and introduced practices that should be followed in other health departments of the state government. The committee also noted that there had been several representations from the medical and para-medical staff, and some by the general public, against the continuation of APVVP. Some of the major issues raised in these representations were:

1. All doctors and staff who were deemed to be on deputation to APVVP were uncertain about their future, particularly whether they would be automatically absorbed into APVVP or would be given options, and whether the service conditions they enjoyed in Government, particularly pensions, would be safeguarded.

2. Doctors recruited by APVVP after its creation were offered fixed-term contracts, which evoked a feeling of insecurity in their minds. Contract employment is not a usual and customary practice in government and parastatal organizations.

3. Doctors appointed by APVVP were neither allowed private practice nor paid non-practicing allowance, while government doctors were entitled to non-practice allowance.

4. APVVP had not achieved its goal of raising institutional funds for quick upgradation of the hospitals.

The Committee observed that APVVP could overcome problems of service conditions through careful and coordinated planning. However, the committee was doubtful whether the APVVP could achieve its primary goal of raising institutional finance on a large scale. "There are two types of activities for which institutional finance

can be tapped. These are (1) Capital Works; and (2) Machinery and Equipment. Capital works by their very nature are unremunerative in the context of hospitals and dispensaries. As such, raising loans for construction of hospital buildings only amounts to advancing the construction activity which ultimately has to be paid for through annual budgetary allocation along with interest. As funds availability would be meager, over a period of time most of the budget allocations would go towards repayment of earlier loans. On the other hand, machinery and equipment can be funded through borrowing if we are able to raise our charges for the services rendered through these machines and equipment. Even in this case, considering the payment capacity of a large section of our people in the districts where the APVVP hospitals are located, it is doubtful whether they would be in a position to repay their installments. In this view of the matter, it is questionable whether APVVP will still be able to raise institutional finance for the development of its hospitals in a big way."

The committee also noted that before the creation of APVVP in 1986 the Director of Health and Family Welfare used to have administrative control over all non-teaching district and Taluk hospitals, primary healthcare centers, and all field staff. He was also in charge of the Family Welfare program and other national health programs like National Malaria Eradication Program, National Leprosy Control Program and T.B. Control program. However, the breakup of the department into the new family welfare, public health and the hospitals wings, many coordination problems were encountered at the field level, particularly in implementation of the national programs, where the services of doctors of APVVP hospitals was crucial.

In light of the above, the committee recommended that APVVP be wound up and the APVVP Act repealed, and the hospitals reverted to either the Directorate of Health or the Directorate of Medical Education, or placed under the administrative control of a new Directorate of Medical Services.

However, these recommendations were never put up for deliberation by the cabinet, whose approval is required before the amendment to the Act can be placed before the assembly. It is noteworthy that while all other organizations created by the TDP were closed down by the Congress government of Chenna Reddy, the question of closing down APVVP continued to be deferred in spite of a

committee report recommending its closure. The Ramamurthy report languished for about a year-and-a-half, when there was a change of leadership and Janardhan Reddy took over as the Chief Minister of the state. The issue of closing down APVVP was never discussed again by the Congress government[17].

17/ In subsequent elections in 1995 TDP was returned to power.

5. Impact of Autonomy

In this section we assess the impact of autonomy of APVVP hospitals in terms of its effect on mission and goal, infrastructure development, mobilization of resources, improvements in hospital services, improvements in administrative systems and financial management, continuing education, monitoring and evaluation, and data collection.

5.1 Mission & Goal

Directly after its formation APVVP sought to enunciate its goals and mission so that each employee and worker in the hospital could perceive the corporate goal of the institution for which he works. In recognition of its hospitals as service delivery institutions, APVVP adopted the following statement of mission:

(a) The mission of each Parishad Hospital shall be to give 'Care, Comfort, and Courtesy', where:

- Care stands for care of the patient.
- Comfort stands for comfortable stay of patient.
- Courtesy stands for courtesy to the attendant.

(b) Care of the patient will be ensured through the following sub-missions:

- Scientific diagnosis.
- Cost-effective regimen.
- Consistency in availability of drugs.
- Zero incidence of hospital infection.
- Referral services.

(c) Comfortable stay of the patient will be ensured through the following sub-missions:

- Toilet maintenance.
- Water and electricity.
- Ward cleanliness.
- Linen supply.
- Furniture maintenance.

(d) Courtesy to the attendant should be extended by every employee of Parishad hospital wherever he/she interacts with the attendant of a patient. Towards this end, employees of the hospitals, insofar as it relates to them, shall, while interacting with any attendant,

- Show concern.
- Explain things.
- Arrange issue of pass.
- Arrange for attendant's accommodation.
- Ensure easy access.

5.2 Infrastructure Development

Water Supply

When APVVP took over the hospitals, a large number of facilities did not have adequately functioning water supply systems. This area was given high priority by APVVP, who took up the challenge of improving water supply by installing borewells, augmenting municipal sources, overhauling existing water distribution systems, adding overhead storage tanks, and providing safe drinking water for patients. Of the 162 hospitals presently being managed by APVVP, water supply distribution system has been overhauled and made functional in all 162 hospitals, an improvement of over 40% as compared to the situation prevailing in 1988.

Electricity

Power supply is less than the demand in the state of Andhra Pradesh, and APVVP hospitals, even though they fall under the "exempt" category, are often subject to prolonged power outages. Furthermore, most of the old hospitals have damaged and unsafe internal wiring and an insufficient number of fans in working condition. This was recognized as one of the major problem-areas by APVVP, and a multi-pronged strategy was adopted to address power shortages. Measures taken by APVVP include installation of direct feeder lines, supply and installation of standby generator sets, electrical rewiring in old hospitals, and provision of an adequate number of fans.

At the time of this report, direct feeder lines have been installed in 28 hospitals, and work is in progress in 82 more. Fifty-three hospitals

have now been supplied with additional generator sets, up from 13 hospitals that had standby generator sets at the time of formation of APVVP. In addition, capacity requirements have been reassessed in all hospitals, and increased in these 53 units. Electrical rewiring has been done in almost all hospitals, and adequate number of fans provided to all hospitals.

Toilet Maintenance

APVVP is giving top priority to toilet cleanliness and maintenance. A separate annual allocation of Rs. 2,500,000 has been made for purchase of sanitary tools and cleaning agents for maintenance of toilets and improvement of sanitation. Detailed guidelines have been issued to all the hospitals for bringing about improvements in sanitation and toilet maintenance, and specific posts of sanitary workers have been created. As a result, there is a marked improvement in cleanliness and sanitation in toilets in APVVP hospitals.

Security

APVVP has taken up construction of compound boundary walls to prevent encroachments on hospital land as well as to prevent entry of stray animals. So far boundary walls have been constructed in all area hospitals and 11 district hospitals.

Building Maintenance

In addition to comprehensive maintenance, APVVP has taken up construction of additional wards, outpatients centers, rooms for diagnostic services, and areas for patients' attendants, details of which are given in the table below.

Table 5.1

Building Maintenance

	1993-94		*1994-95*		*1995-96*	
	Hospitals Covered	***Exp. (Rs '000)***	***Hospitals Covered***	***Exp. (Rs '000)***	***Hospitals Covered***	***Exp. (Rs '000)***
Construction of new compound walls	2	216			1	110
Improving existing compound walls	4	125				
Comprehensive maintenance	73	9,385	37	2,722	26	1,537
Additional operation theaters	9	3,394	5	6,456		
Additional outpatient areas	1	500				
Additional service areas	1	55				
Additional space for attendants	4	1,247			1	310
Total	94	14,922	42	9,178	28	1,957

5.3 Mobilization of Resources

APVVP envisaged several ways of raising resources to augment funds it receives from the government, currently around Rs. 1,500 million annually. These include charging user fees, instituting a system of accepting donations, lotteries, and donor funding. We will discuss each in turn.

User Fees

Prior to the formation of APVVP all health care services were provided free of charge. One of the first things that APVVP did immediately on its creation was introduction of user charges for services provided, though it was only in April, 1989, that a formal system comprising fee structure, waivers, exemptions, and collection process was set up.

However, the achievements of APVVP in raising resources through user fees have been almost negligible.

Table 5.2

User-Fees as Percentage of Annual Expenditure (as per audit reports)

Year	*Annual Expenditure*	*Collection*	*% of Expenditure*
1987-88	309,631,314.11	571,133.87	Negligible
1988-89	180,509,337.49	652,638.47	Negligible
1989-90	352,218,204.62	861,317.60	Negligible
1990-91	336,071,621.29	976,560.09	Negligible

Special Schemes

APVVP introduced Annadana and Sada Annadana schemes to mobilize funds from the general public. Under the Annadana scheme the donor contributes the cost of one day's food for all patients in the hospital, and the food service for that day is dedicated to the name of the person designated by the donor. Under the Sada Annadana scheme the donor contributes the cost of ten day's food for all patients, and food service is organized once a year for ten years on the specified day. Moreover, the name of the donor is displayed in a prominent place of the hospital on the day of service, and is also acknowledged on the Hospital Foundation Day.

The total collection from these schemes has been only Rs. 63,441 in 1989-90 and Rs. 5,570 in 1990-91.

Donations

By far the most successful of all new schemes was that of donations that APVVP started receiving from the general public and charitable organizations and trusts. In the first year itself, i.e., in 1986-97, APVVP received Rs. 1.5 million. The next year was slightly better, with receipts of Rs. 2.5 million. The scheme had to be suspended in 1990 due to some legal issues of a government organization receiving funds from private parties. This was resolved over the next couple of years, and in 1990-91 APVVP raised Rs. 20.35 million in a concerted drive.

Lottery

APVVP also considered the idea of running a lottery scheme. However, in view of the poor experience of other organizations, with

lottery schemes like the Andhra Mahila Sabha, the idea was shelved indefinitely.

Table 5.3

APVVP Revenue from All Sources (excluding government grants)

Year	*Hospital*	*Donations*	*Annadana and Sada Annadana*	*Total*
1986-87	-	1,500,000	-	1,500,000
1987-88	571,134	2,520,509	-	3,091,643
1988-89	652,636	-	-	652,636
1989-90	861,318	-	63,441	924,759
1990-91	976,560	2,035,111	5,570	3,017,241
1991-92				
1992-93	1,489,928	550,000	95,209	2,135,137
Total	**4,551,576**	**7,155,620**	**259,429**	**11,580,845**

External Funding

Probably the biggest achievement of APVVP has been the approval in 1993 by the World Bank for a loan of US$133 million for a special project that will help APVVP and the government of Andhra Pradesh finance activities that will strengthen institutions for policy development and implementation capacity, and improve quality, access, and effectiveness of health services at district area and community hospitals. The main objective of the project is to elevate the health status of AP by improving the efficiency of resource allocation (as measured by the timely implementation of health policy reforms set up by the Health Sector Development Policy Statement of the Government), and quality of secondary level health care (as evaluated by: activity indicators like turnover rates, bed occupancy, and average length of stay; efficiency indicators like the number of major surgeries, electro-medical tests and their percentages of admissions in a given period; access and effectiveness indicators like staffing, equipment and drugs available, waiting time, patient satisfaction, cost recovery from user charges, referral system and management and equipment maintenance skills). The goal of the project is to attain this objective by setting up a first order referral system. Since the majority of the AP population live in the rural area, it is important to set up a health care system that is accessible to the

Table 5.4

APVVP Expenditure

Year	*Salaries*	*Infrastructure*	*Patient Care*	*Others*	*Total*
1987	7,668.45 (0.33%)	23,692.15 (1.01%)	61,441.90 (2.63%)	2,247,360.5 (96.03%)	2,340,163.00 (100%)
1988	217,646,857.5 (70.29%)	3,375,110.87 (1.09%)	787,294,94.6 25.43%)	9879851.22 (3.19%)	309,631,314.1 (100%)
1989	130,945,407.8 (38.68%)	12,745,281.5 (3.76%)	63,175,378.9 (18.66%)	131,696,715.5 (38.9%)	338,562,783.7 (100%)
1990	200,912,473.7 (60.41%)	22,972,479.7 (6.91%)	60,564,171.2 (18.21%)	48,150,511.6 (14.48%)	332,599,636.1 (100%)

Salary = Salary + Wages + Travelling Expenses

Infrastructure = Machinery + Maintenance + Motor Vehicles + Minor and major repairs + Construction

Patient Care = Materials and supplies + Diet + Drug

Others = All other expenses not in the above categories

rural population. In the current system, the big urban hospitals absorb the majority of the health care budget. Lack of staff, equipment, and drugs due to low funding prevents rural hospitals from providing adequate level of care. In order to make health care accessible to the majority of the people, a hierarchy of hospitals with referral facilities needs to be established. Such hospitals will have the advantage of physical proximity to the people, greater cultural acceptability, personal attention as a result of small size, facility for relatives who can accompany the patients and stay in the adjoining Dharmashala, avoidance of the impersonal approach of the large hospitals, and elimination of expensive administrative overheads.

In order to create a strong referral health system that will support the primary health care services, the project needs to reform the organizational structure for preventive and promotive care at the district level and set up a program of health sector policy reform as the basis for new health sector development. The health sector policy reform will address issues like the size of the health care budget, the imbalance between secondary and tertiary health care facilities, non-Plan allocation for secondary health sector user fees, private contractual services, strategic planning capacity, work force issues, etc.

The project will help the government of Andhra Pradesh finance activities that will strengthen institutions for policy development and implementation capacity, and improve quality, access, and effectiveness of health services at district area and community hospitals. The project aims to increase hospital bed capacity from 9,651 to 14,000 by the completion of the project. The bed capacity, on the secondary level, would increase by 45% at district hospitals and 22% at area and community hospitals. Monitoring capacities would be strengthened and a hospital management information system would be built up. A computer system would be set up at headquarters and district levels, and a new medical record system for in-patients and diagnostic services would be established. At the same time, APVVP would recruit more key personnel, and increase the training for existing professional, clinical, and technical cadres.

The project would improve the health status of the AP population by reducing mortality, morbidity, and disability and thereby increasing the earning potential for its people. By strengthening AP's referral health system and increasing the accessibility of health care in remote areas, it would be possible to utilize the available resources for providing patients with timely care at a lower cost. Maternal mortality rate would be reduced and emergency obstetric care will be provided in a timely fashion. Moreover, improved quality of health care on the secondary level would provide support for primary care and prevent overflow into tertiary care. By the time of project completion, the APVVP hospitals would have the capacity to treat 13 million outpatients and 1 million inpatients, instead of the present capacity of 9 million outpatients and 0.6 million inpatients.

The total costs of the project, spread over five years starting in 1993, is estimated at about Rs. 6,083.2 million, or US$158.9 million equivalent including taxes and duties estimated at about $8.8 million equivalent. The International Development Association would finance about US$133 million, i.e., about 89% of total direct costs net of taxes, while the balance would be financed by the state government. The direct and indirect foreign exchange cost is estimated at US$27.5 million. The project would finance civil works, equipment and furniture, vehicles, medical and laboratory supplies, medicines, other supplies, management information systems supplies, professional services, training studies and evaluations, and incremental salaries and costs on a declining basis. Cost estimates by component are as shown in table 5.5 below:

The World Bank disbursed the first instalment of US$10 million in December 1993.

Table 5.5

APVVP Development Project

Component	*Rupees (millions)*
Institutional Strengthening	
(a) Improve the Policy Framework	16.60
(b) Strengthen Implementation Capacity	112.88
Improve Service Quality (District Hospitals)	
(a) Renovate and Extend District Hospitals	923.01
(b) Upgrade Clinical Effectiveness	838.78
Improve Service Quality (Community Hospitals)	
(a) Renovate and Extend District Hospitals	1268.16
(b) Upgrade Clinical Effectiveness	1161.84
(c) Improve Functioning of Referral	64.99
Total Costs	**4,386.26**

5.4 Equipment Maintenance

One of the problem areas in management of public hospitals in Andhra Pradesh has been maintenance of medical equipment. It has been frequently observed that while most of the hospitals seem to be well supplied with necessary equipment, maintenance of this equipment has been quite indifferent. APVVP realized this and made concerted efforts to ensure that the down-time on equipment was very low.

As a first step, APVVP carried out a study to determine the main reasons for continuing problems with equipment, and found that these reasons could be classified as under:

Next, APVVP classified all equipment as (i) Common Ward instruments; (ii) Analytical Equipment; (iii) Sterilization Equipment; (iv) Pneumatic, Hydraulic and Mechanical Equipment; (v) Endoscopy Equipment; (vi) Electro-Medical Equipment; and (vii) Imaging Equipment. It was recognized that while some of these equipments were prone to frequent breakdown, others were not. Furthermore, while some equipment could be repaired by in-house technicians, others required more professional attendance. Accordingly, three categories were made:

Category I: This included all equipment to be serviced and repaired by the original manufacturer or their authorized service agents only, and contained some or all equipment classified as common ward,

Table 5.6

Equipment in Good Condition but Lying Idle

Primary Reason	***Secondary Reason***
Equipment Supplied, but Not Installed	1. Supplier took 90 % payment and did not return. 2. Fixtures (electrical fittings, stabilizer etc.,) not available. 3. Equipment received in damaged condition.
Equipment Supplied but of Poor Quality	Equipment choice based on price alone
Equipment Needs Minor Repairs	1. Lack of interest 2. Don't know correct maintenance 3. Wear and tear 4. Old age
No One Trained to Use It	1. Through donation 2. Supplier did not show up for training 3. Person who was trained was transferred

endoscopy, imaging, and electro-medical equipment.

Category II: This included all equipment where no service contract was deemed necessary i.e., where either the breakdown could be attended in-house or where the frequency of breakdown was very low. This category included some or all equipment classified as common ward, analytical, sterilization, and some electro-medical equipments.

Category III: This included all equipment subject to frequent breakdown and which could not be easily or safely repaired by in-house personnel, but could be repaired by qualified technicians, not

Table 5.7

Equipment Remains in Disrepair for Prolonged Period

Primary Reason	***Secondary Reason***
Minor Repairs Needed	1. No budget for electrical fittings. 2. No spare parts. 3. Fear supplier will rescind guarantee. 4. No one knows how to operate.
Supplier or Service Contractor Does Not Attend	1. Monopoly on parts. 2. Problem with payment. 3. Supplier busy.
No One Comes	1. Equipment donated.

necessarily the manufacturers. This category included all or some pneumatic, hydraulic, and mechanical equipment.

The repair and maintenance policy of APVVP centered around identification of the relevant maintenance requirements for different equipment and prescribing appropriate repair schemes. Thus, the repair and maintenance responsibility of Category I equipment was entrusted to the original manufacturer, and appropriate maintenance contracts were drawn up. Category II equipment became the responsibility of in-house technicians, and maintenance of Category III equipment was done through service contracts with authorized firms.

Furthermore, emphasis was placed on preventive maintenance, and the primary responsibility for preventive and routine maintenance was placed on the person operating the equipment. APVVP found that though the persons in charge of equipment generally know how to use it, they know little about routine maintenance. Hence a workshop on preventive maintenance of various equipment was organized. The first such workshop was organized in 1989 and 10 radiographers were given maintenance training on X-ray machines. The result was a high confidence level among the radiographer regarding their ability to maintain the machines. Encouraged by this experiment, APVVP formed an Equipment Maintenance Training Center (EMT) as part of the hospital organization to impart initial, follow-up and refresher training programs. EMT was also entrusted with the task of providing backup support for repair of Category II equipment, as well as technical support for Category I and III equipment.

The results of all these initiatives have been quite encouraging. An evaluation of the equipment maintenance policy was carried out in 1992 by Madeline Hirschland (Harvard University), who sought to address the following questions:

(a) What changes in equipment utilization have occurred, as compared to standards of previous periods?

(b) Has the repair categorization system filtered down and is it being implemented?

(c) How are service contracts working out?

(d) Is the budget for repairs, maintenance and purchase of small equipment being spent?

Hirschland looked at the progress made in equipment maintenance in six hospitals. The main findings of this evaluation are:

(i) It was noted that there was a substantial reduction in time required for many equipment replacement and authorization of repairs, which had diminished from about six months when the hospitals were under direct government control to one month under the APVVP. As regards many other pieces of equipment, however, there was no significant improvement.

(ii) With regard to major repairs, it was noted that for repairs that could be done by service contracts and EMTC, the delays being experienced earlier disappeared. However, there was not much improvement in time taken for repairs that could be done by suppliers only.

(iii) With regard to small repairs, Hirschland noted that it was too early to judge improvement in time since the training of on-hand operators was still in progress.

(iv) The categorization policy was not being followed by most hospitals. In fact a few hospitals were not even aware of it.

(v) As far as budget utilization was concerned it was found that while some hospitals were using most of their budget for repairs, others were using very little.

5.5 Efficiency

Hospital services are traditionally measured by the number of outpatient visits, and the number of inpatient admissions and discharges, and efficiency analysis are guided by traditional hospital service indicators, such as:

- The bed occupancy rate, which is a measure of the percentage of total available beds which are engaged by patients during the year;
- The average length of stay, which is defined as the average number of days a patient remains in the hospital between admission and discharge; and
- The bed turnover rate, which refers to the average number of inpatients per bed per year.

Mahapatra and Berman (1995) also note that “hospitals are multi-product enterprises, which makes monitoring of output difficult.

However, there are some indicators which can be used to reflect overall hospital activity. Information on bed capacity of hospitals, number of inpatient days, and admissions (or discharges plus deaths) can be used to compute the bed occupancy rate (BO), average length of stay (ALOS), and the turnover rate (TR)." In fact, knowledge of any two of these indicators is sufficient, as the third can be easily computed from any two of these indicators.

These indicators are relative measures of efficiency, and have to be used in comparison with similar hospitals in one time period, or for the same hospital over a time period. Thus, these indicators may be used to make inter-temporal assessments, i.e., as indicators of change of service statistics of a hospital over time, or cross-sectional comparisons, with similar facilities.

In absence of any data on other (private) hospitals, we use inter-temporal standards as comparison points for different categories of hospitals to judge the relative performance of APVVP overtime.

Table 5.8

ALOS and BOR for APVVP Hospitals

Year	*Community Hospitals*		*Area Hospitals*		*District Hospitals*		*All Hospitals*	
	ALOS	***BOR***	***ALOS***	***BOR***	***ALOS***	***BOR***	***ALOS***	***BOR***
1991	5.97	89.08	7.74	85.31	5.83	86.37	5.80	84.40
1992	5.89	83.41	6.33	78.87	6.26	87.34	5.88	84.58
1993	5.40	85.85	6.35	79.59	5.98	84.20	5.83	84.00
1994	5.50	78.10	6.99	89.88	6.19	80.36	5.86	83.29

In almost all cases we find that the bed occupancy rate has either not improved or has fallen down considerably. Similarly, while there have been improvements in the average length of stay, these have been marginal.

5.6 Financial Management

Financial Administration

APVVP has taken many innovative steps to manage and control funds at its disposal. First, APVVP reorganized the classification of expenses to follow a more functional categorization. The new heads of allocation are (i) drugs and therapeutics; (ii) diagnostic and laboratory materials; (iii) surgical and dental materials; (iv) hospital requisites; (v) furniture; (vi) equipment; and (vii) others. Second, a concurrent audit system has been introduced and an internal audit wing has been created. The internal audit wing, consisting of experienced officers drawn from the offices of the Accountant General and Directorate of Treasuries and Accounts, is chiefly responsible for checking revenue and expenditure, performance auditing, and material management. Third , a number of financial powers have been delegated to the hospital superintendent and district coordinators, especially for minor and routine repairs. A system of Lay Building Maintenance has been introduced, and a maintenance grant of Rs. 0.20 per square foot is set apart for this purpose. The grant is released in quarterly installments to the Medical Superintendent, who is expected to be able to attend to commonly required and small repair work to his hospital buildings without getting bogged down in bureaucratic procedures. Financial powers are delegated to the District Coordinators and Resident Medical Officers depending on the type of repairs.

Audit

In its meeting of February 4, 1987, APVVP decided to have nongovernment auditors and chartered accountants to audit all accounts and prepare balance sheets and profit/loss statements. A system of internal audit is in place, that checks each item of expenditure to ensure that it is correctly classified, appropriate sanctions are issued, and all relevant procedures and rules are collectively followed. The internal auditors also keep in view the principles of performance audit to evaluate the overall functioning of the organization. Specific emphasis is laid on whether the costs of various services have a reasonable bearing on the main objectives of the institution. In this regard, internal audit also verifies (i) whether the ratio or degree of overheads to recurrent expenditure is judicious and within industry limits; (ii) the utility of specific equipments and service to see whether the objective with which it was procured or instituted is by and large achieved; (iii) the procurement of medicine, equipment, linen, and all consumables is not far in excess of the requirement; (iv) whether there is any shortfall in the estimated revenue receipts, and reasons thereof; (v) whether the investments

held by APVVP at any time are at an optimum level; (vi) whether the withdrawal of funds is against actual and accurate requirement; and (vii) whether there are any lacunae in the existing system regarding collection of revenue from various sources or spending of money, and suggestions for remedial measures.

Depreciation Fund

The APVVP Act of 1986 entrusts to the Commissionerate the function of providing quality equipment to its facilities. Keeping in view the long term need for effective maintenance and modernization of the equipment in the medical institutions, and difficulty in procuring adequate finances whenever needed for the purpose, APVVP took the innovative step of creating an Equipment Depreciation Fund which could be utilized for replacement of condemned, old and unserviceable equipment. This fund was created out of the annual finances of the Parishad by setting apart an amount not exceeding 25% of the Annual Receipts of the Parishad. (Provision of depreciation for machinery and equipment is a normal practice in commercial organizations, and the Income Tax Act also provides for certain rates of depreciation depending on the type of machinery, when assessing the total income of commercial organizations).

5.7 Hospital Services

Standardization of Hospital Services

In order to secure appropriate and balanced growth and development of hospitals, APVVP standardized the scale of facilities in different categories of hospitals, and laid down a normative range of services that consisted of a minimum level and maximum level for each type of service. It was thought that this system of standardization would enable the hospitals to direct their resources towards provision of the prescribed minimum range and level of services for the respective category, discourage investment in any facility outside the prescribed maximum range and levels, and resist local and political pressures, patronage and indifference.

APVVP reclassified hospitals according to the norms of the Bureau of Indian Standards (BIS), which uses number of beds as the basis.

Table 5.9

Proposed Standardization of Non-Teaching Hospital Services

Clinical of Hospital	***Clinical Services***		***Laboratory Service***	
	Minimum	***Maximum***	***Minimum***	***Maximum***
Community Hospital (30 beds)	General Medicine and Surgery; Gynecology and Obstetrics	Family Planning, Denistry, Pediatrics	Clinical Pathology; Bleeding Facility; Radio diagnosis	Blood Bank
Area Hospital (100 beds)	General Medicine and Surgery; Gynecology and Obstetrics; Family Planning; Dentistry; Pediatrics	Orthopedics; Ophthalmology; E.N.T.; Skin & V.D.; Emergency Ward	Clinical Pathology and Biochemistry; Blood Bank; Radio diagnosis	Bio- chemistry
District Hospital (250 beds)	General Medicine and Surgery; Gynecology and Obstetrics; Family Planning, Dentistry, Pediatrics; Orthopedics; Opthalmology; E.N.T.; Skin & V.D.; Emergency Ward	Traumatology, Cardiology, Psychiatry, Diseases of Chest & TB	Biochemistry; Blood Bank; Microbiology; Pathology; Radio diagnosis	Ultra- sonography; Endoscopy; Radio-therapy; Forensic Medicine and Toxicology
District Hospitals (500 beds)	General Medicine and Surgery; Gynecology and Obstetrics; Family Planning; Denistry; Pediatrics; Orthopedics; Opthalmology; E.N.T.; Skin & V.D.; Emergency; Traumatology; Cardiology; Psychiatry; Diseases of Chest	Clinical Pathology, Gastro- enterology, Medical oncology Cardio-thoracic surgery; Urology; Pediatric surgery; Plastic surgery	Biochemistry; Blood Bank; Microbiology; Pathology; Radio Diagnosis; Ultrasonography; Endoscopy	Hematology, Forensic Medicine & Toxicology

Diagnostics Services

To facilitate improvements in quality of services APVVP adopted the slogan “scientific diagnosis” as the all-important goal in patient care. As part of this scheme, APVVP laid down new standards for equipments in all facilities, and ensured provision of all equipment, including ultrasound scanners, X-ray machines, ECG machines and calorimeters, to all hospitals.

Emergency Services

APVVP has taken many steps to improve the preparedness of hospitals to meet emergency situations. These include identifying and improving availability of equipment required for emergency services, like oxygen cylinders, suction apparatus and refrigerators. The following table lists the achievements against targets.

Table 5.10

Equipment

Equipment	*Before APVVP*	*Added by APVVP*
Oxygen Cylinders	2,000	11,000
Suction Apparatus	160	230
Refrigerators	160	15

Critical Zone Facilities

APVVP identified operation theaters and labor rooms as critical zones of a hospital, and took up a program of improving facilities in the critical zones. As a result, all operation theaters in district hospitals have been provided with air conditioners, additional sterilizers and Boyle's apparatus.

5.8 Drugs

Availability

Availability of medicines in APVVP hospitals is much better than any other governmental health institution in the state. APVVP has prepared a list of 63 essential drugs, and has developed a system to ensure that these drugs are available at all times in the hospitals. The district coordinators of hospitals services have been given substantial financial powers to purchase drugs, and the general experience seems to be that there is no disruption in supply of drugs in most APVVP hospitals.

Procurement

APVVP has taken a number of innovative steps to improve the supply of drugs. As a first measure, APVVP decided to deal with only those suppliers who had a stake in their long term reputation, adopted good manufacturing and trade practices. The process of calling for tenders was also changed, and a technical bid was introduced before the actual financial bid. Scrutiny of the technical bid was entrusted to a multi-disciplinary team on the basis of agreed criteria like availability, manufacturing and quality control facility, past supply record, etc. Only the firms satisfying the technical scrutiny were invited to offer financial bids.

This two-part system of bidding and procurement considerably improved the supply and quality of drugs, and successfully discouraged the practice adopted earlier by certain firms of quoting unreasonably low rates in their bid to be included in the rate contract at any cost, and then making up by short supplying and compromising on quality.

5.9 Administrative Procedures

Personnel

In 1987 APVVP started compilation and analysis of personnel data, and by October 1988 all personnel records were computerized. At the same time APVVP also reviewed the staffing protocol, and laid down revised guidelines for creation and filling up of posts. In the process, a large number of posts became non-essential, and were abolished. Records available indicate that APVVP abolished 265 surplus positions in the non-medical category, and created 82 new posts for plumbers, electricians, tailors, carpenters and gardeners.

Table 5.11

Revised Guidelines for Creation of Posts

Category	*Existing Yardsticks*		*Proposed Pattern*		*Surplus*	
	200 beds	*> 200 beds*	*200 beds*	*>200 beds*	*200 beds*	*> 200 beds*
Administrative Officer	1	1	nil	nil	1	1
Senior Assistants	4	5-6	4	5	-	-
Junior Assistants	8	10-12	4	5	4	5-7
Typist/Telex Operator	2	2-3	2	3	-	-
Record Asst.	2	2	nil	1	2	1
Class IV Employees	3	4-5	1	2	3	2-3

Job-Oriented Selection Tests

To ensure that the right person is selected for the right job, APVVP has introduced innovative job-oriented selection tests for stenographers, nursing assistants, dark room assistants, laboratory technicians, refractionist, electricians, mechanics, plumbers, barbers,

gardeners and sanitary workers. For example, the candidates for the position of sanitary workers have to take tests in toilet cleaning and floor mopping.

Delegation of Purchase Powers

APVVP delegated substantial financial powers to heads of hospitals for the purchase of drugs and other hospital necessities, maintenance and service of equipment, emergency repairs, etc.

In addition, hospital superintendents were given emergency financial powers up to Rs. 30,000.00 per month to ensure that patient care does not suffer for want of drugs and other hospital necessities. Similarly, deputy surgeons in-charge of Taluk hospitals were authorized to make emergency purchases up to Rs. 1,000.00 per month .

Table 5.12

Delegation of Powers

Description	***Rs.***
Painting and Coloring	1,000
Masonry Work	2,000
Wood Work	2,000
Water Supply	5,000
Sanitation and Drainage	5,000
Electrical Works	2,000
Garden Maintenance and Other Works	1,000
Refrigeration and Air-Conditioning Equipment	5,000
Radio and Diagnostic Equipment	2,000
Sterilization Equipment	3,000
Other Equipment	2,000

Inventory Control

Prior to formation of APVVP there was no system of monitoring supply and consumption of inputs. Materials and supplies were being procured randomly, sometimes for periods as long as 3-4

years. There were several instances of drugs outlasting their expiry dates and other materials being condemned from the shelves of the store itself. This practice of unplanned purchase also led to shortage of funds for more essential and fast moving items.

APVVP initiated several steps for effective inventory control. In the critical area of supply of drugs, APVVP introduced monthly central monitoring of stock for about 55 drugs. New rules and procedures were introduced, which required the purchasing officers to take the existing stock account before placing fresh orders. Even then, purchase of most items was restricted to buying for one quarter at a time only. At the same time, introduction of internal audit provided a double check of inventory control.

Incentives

The Governing Council of APVVP debated the issue of financial incentives for physicians and nurses over many meetings in 1987 and 1988. One of the first proposals considered was that of sharing revenue from pay-beds with consulting physicians and para-medical personnel. It was suggested that 60% of the collected revenue could be given to the consulting physician, 30% to the para-medical personnel on duty while the remaining 10% could be retained by the institution for development works. While this issue was discussed several times, no consensus was ever reached.

As a starting point, however, the Governing Council decided to charge for physical examination reports, and set a fee of Rs. 30.00 per certificate of which the examining physicians were permitted to retain 50 %. This was not a new practice, however. Government hospitals also charged for physical examinations (Rs. 8.00 per certificate) and permitted the examining physicians to retain 25% of the fee.

5.10 Continuing Education

Recognizing that quality of services provided depend to a large extent on the morale and motivation of employees, APVVP started many programs for continuing education and training of its staff. First, APVVP introduced a bi-monthly House Journal that provided a forum for expression and academic pursuit for all employees. Second, APVVP established libraries in all its hospitals, and these libraries subscribe to at least six of the more important medical journals. Third, APVVP initiated clinical seminars in district hospitals

every month. Fourth, a program of in-house and in-service training was launched. So far 2 batches of dental surgeons have undergone in-service training at Dental College, Hyderabad; 2 lady medical officers from each district hospital have been trained in ultra sonography; 5 batches of radiographer have undergone training in the Equipment Maintenance Training Center, conducted in collaboration with M/s. WIPRO and SIEMENS; 1 batch of electricians has undergone training at EMTC under the Equipment Maintenance Engineer; and in collaboration with the National Institute of Administration and Family Welfare, New Delhi, a curricula for top, middle and lower level administrators has been developed and the training for the Medical Officers in various positions will be undertaken. Finally, a curricula for staff nurses and technicians is being developed in collaboration with the Department of Bio-medical Engineering, Osmania University, Hyderabad.

5.11 Monitoring

Hospital Statistics

Even before the creation of APVVP hospital statistics were being collected by the state government in the department of health, as is the practice in almost all government departments. However, both reporting and analysis of data were indifferent. The hospital administrators considered data collection and reporting an avoidable routine exercise, and paid little or no attention to this process. At the same time, the government also did not emphasize the need for any analysis, and routinely passed on the information to Ministry of Health, Government of India.

With the creation of APVVP and the ensuing responsibility of justifying their formation, APVVP revised the existing data collection protocol to obtain statistics that could be used to formulate some indicators of hospital performance (forms used by APVVP for collecting and analyzing information from individual hospitals are placed in annexes 1-4). APVVP found that though a fair amount of data was being generated, not all of it was useful for any meaningful analysis. A number of changes were therefore made in the existing system. Admissions and discharges of referral cases were now reported separately from direct admissions and discharges. Referral admissions were defined as admissions done in response to specific referrals from health care delivery institutions located within the catchment area of the hospital. Similarly, patients discharged but

referred to other hospitals were considered “referral discharge”. Separate registers were introduced for recording lab and imaging investigations for outpatients and inpatients.

Indicators

Recognizing that mere collection of hospital statistics is not useful, APVVP introduced monthly performance appraisal and budgeting at three levels: within each facility, among a group of facilities, and for APVVP as a whole. Facility level indicators include bed occupancy ratio, length of stay, operational status of clinical and diagnostic facilities, expenditure of consumable, and revenue from diagnostic and clinical services. For purpose of inter-institutional comparisons, hospitals were categorized as two sub groups, district hospitals and community hospitals. For purpose of reporting to the government and the legislature a standardized format was adopted that gave an overall picture of the performance of all hospitals belonging to the APVVP. A computer data base was developed for the APVVP head office, where all information recorded from individual hospital was fed. A state wide review was recommended once every quarter.

6. Discussion

Almost a decade has passed since the formation of APVVP, and many significant gains have been recorded by this autonomous organization. It is not clear, however, whether these gains can be attributed to the autonomous nature of the organization or to other factors such as dynamic and committed leadership. In this section we examine this issue in more detail. In doing so we also assess the nature and extent of autonomy and evaluate the performance of the APVVP hospitals in light of the objectives of the organization and of the government.

6.1 Enabling Institution Charismatic Leadership?

Since its formation APVVP has had five regularly appointed commissioners. The first commissioner was a renowned physician-surgeon of Andhra Pradesh, with a fair amount of administrative experience as superintendent of individual hospitals. However, he was unable to articulate the goal and mission of the newly-created autonomous organization in a manner that was acceptable to a public largely used to government-administered bodies. In emphasizing the revenue mobilization aspect of APVVP over quality of health care and efficiency issues, he almost immediately started a public outcry against what was perceived to be the introduction of large user fees across the board. This embarrassed the government considerably, and led to the transfer of the commissioner after only three months.

The second regularly appointed commissioner was also a renowned physician, and came in at a time when the image of the young APVVP needed substantial refurbishing. While there is no doubt that the public outcry against APVVP abated soon after the announcement that there were no plans to introduce user-fees, there is little evidence to show that the commissioner achieved much else. In fact, we learned from various sources that during this period there were many instances of financial irregularities in APVVP, and the government decided to remove the commissioner after about eleven months.

The first year-and-a-quarter in the life of APVVP were clearly an embarrassment to the government, and there were all indications that at this rate the experiment of creating an autonomous organizations to manage all the district hospitals would not succeed. However, the government continued to believe in the founding principles of APVVP, and now sought to find a leader who could take advantage of the enabling environment that APVVP was believed to have created. The APVVP Act required the commissioner to be a medical doctor, while managing an organization as large and diverse as 140 hospitals clearly required a person of proven managerial and administrative capability. The government was fortunate to find such a person, who not only had a medical background but also belonged to the elite career administrative service of the country and had a proven track record as an able administrator. The third commissioner took charge in August 1988, and this marks a clear watershed in the growth and development of APVVP.

It was during this time that the mission and goals of APVVP were clearly enunciated, and APVVP was presented as a service organization. Quality of care received a high priority, along with improvements in efficiency and delivery of services. Attention to quality of service led to a policy on maintenance of equipment and buildings, and changes in the general attitude of the employees of APVVP toward patients and their attendants. Downtime on equipment decreased considerably, and the decentralization of repairs and maintenance of buildings led to significant improvement in their condition.

Attention to issues of efficiency led to widespread changes in administrative and financial systems within APVVP. More powers were delegated, and more responsibility entrusted to lower levels within the organization and within hospitals. Major changes in purchase policies were brought about with the introduction of the system of two-part tenders, and inventory control systems and procedures were tightened. Staffing requirements were reassessed, and a number of posts were abolished or converted to other posts. And finally, a system of monitoring, data-collection and analysis was set up, that required all unit hospitals to periodically send in reports that enabled computation of service indicators.

It was during this time that a long-term plan was drawn up to increase hospital bed capacity from 9,651 to 14,000, i.e., by 45% in district hospitals and 22% in area and community hospitals, to strengthen the hospital management information system, set up a computer system at headquarters and district levels, and establish a

new medical record system for in-patients and diagnostic services. The total project was expected to cost over Rs. 150 million, and was expected to improve quality, access, and effectiveness of health services at district area and community hospitals. This project was approved by the state government, and submitted to the World Bank (who subsequently approved a loan of Rs. 133 million).

Other innovative steps taken during this time included measures for revenue mobilization, like Annadana and Sada Annadana; schemes for continuing education, like a House Journal, libraries in all hospitals, monthly clinical seminars, and in-house and in-service training for doctors and nurses; standardization of hospital services; and introduction of internal financial and performance audit.

During the two years 1988-90, APVVP matured as an organization and started delivering its promise of good quality health care. Perhaps the greatest testimony to the achievements of APVVP is that the new Congress government, that closed down all the other organizations started by the TDP government, kept APVVP just as it was before.

The third commissioner was transferred out in July 1990, and this followed a period of non-action, with no regular commissioner for over a year-and-a-half after that. By April 1990 the Ramamurthy committee had submitted its report recommending the closure of APVVP, and with the transfer of the third commissioner, it was thought that the closing of the APVVP would be a mere formality. But such was the resilience of the organization that in spite of the eighteen months without a full-time leader, the organization not only survived, it also continued to deliver as before.

The fourth commissioner was appointed in January 1992, and stayed for a little over three years. This period marked another watershed in the growth of APVVP, though in a rather negative way. The new commissioner, a physician as required by the Act, was not exactly known for her administrative abilities, and had on previous occasions had some trouble with the government over non-compliance with posting orders. Widely known for her political clout, she turned the organization from an independent body to a quasi-government department, introducing all the problems and organizational weaknesses of both an autonomous organization as well as a government department. Government rules and regulations started being followed in spirit if not in letter, and many administrative and financial procedures were changed so as to follow the more bureaucratic government style. Government approval was now

being sought for almost everything, and very few decisions were being taken in the organization itself. In effect, autonomy was gradually being given away and APVVP was being converted to a de facto government department. As a result, many of the gains that came about because of the autonomous nature of the organization were frittered away.

The fourth commissioner stayed till June 1995. The fifth full-time commissioner was appointed soon thereafter and is currently in charge.

As the above account indicates, it is not easy to unequivocally attribute success or failure of the mission to the enabling environment created by the autonomous nature of the organization, since leadership also plays a very critical role. APVVP enjoyed the same autonomous environment since its creation, and while some commissioners could bring about many significant changes, others could not. It is clear that many of the changes and improvements brought about by at least one commissioner would not have been possible had it not been for the autonomy that APVVP enjoyed. It is also equally clear that autonomy alone cannot guarantee the best result, as many other commissioners did not appear to make full use of the opportunities that it offered.

Conclusion 1: Full benefits of autonomy can be better realized if the right person is selected for the job. Full benefits of good leadership can be better realized if the environment is enabling.

6.2 Judging Success: Standards Used

One way of judging the performance of APVVP is by comparing the achievements with the objectives of the organization. The objectives of APVVP have been understood and expressed in a number of different forums and often in different ways, and it is useful to make a list of those stated by the Chief Minister, Health Minister, Ramamurthy Committee, and the Act.

Chief Minister:

(i) to make hospitals free from government interference;

(ii) to provide improved medical facilities to the poor and needy.

Health Minister:

(i) to augment resources by mobilizing donations, charging fees for diagnostic and treatment services, through paying wards and through commercial projects;

(ii) to provide better medical care and efficient functioning of hospitals.

Ramamurthy Committee:

(i) to raise institutional finance on a large scale.

APVVP Act:

(i) to formulate and implement schemes for comprehensive development of dispensaries and hospitals;

(ii) to purchase, maintain and allocate drugs and quality equipment to various dispensaries and hospitals;

(iii) to receive donations, funds, and the like from the general public and institutions both from within and outside India.

(iv) to plan, construct and maintain commercial complexes, and paying wards;

(v) to provide diagnostic services and treatment on payment basis and utilize the receipts for the improvement of hospitals and dispensaries.

These different objectives can be classified and discussed as under:

Government Interference

It is interesting to note that keeping the hospitals away from government interference[18] was an objective clearly enunciated only by the Chief Minister[19]. There is no evidence to indicate that the performance of the hospitals was being adversely affected in any way because of government interference; however, it is not unreasonable to assume that the government was finding it increasingly difficult to handle the growing public criticism of the poor functioning of government hospitals, and thus decided to distance itself by creating an autonomous body like the APVVP.

There is little recorded evidence of the nature and extent of government interference, and the manner in which APVVP handled it, for by its very nature “government interference” tends to be unrecorded. However, anecdotal evidence indicates that APVVP

18/ We recognize the difficulties in describing and defining interference, and for the purposes of this analysis, we deem interference to imply any intervention that is aimed at benefitting a private demand more than a public demand.

19/ Actually, this issue was also discussed in the Assembly deliberations.

seldom had to face any interference from the government in its day-to-day activities.

In fact, as far as the public hospitals were concerned, APVVP was a layer between the hospitals and the government, and to that extent the more pertinent issue is that of interference by members of the APVVP Board. Here again there is little evidence to indicate whether there was any interference after the formation of APVVP, though it is clear that many members of the Board are actively involved with the functioning of the organization and the hospitals.

Institutional Finance

One of the areas in which APVVP has been a huge success is in mobilization of institutional finance. The development project that APVVP initiated was successful in obtaining World Bank financial assistance of Rs. 133 million, an achievement that would have not have been easy had APVVP not been an autonomous body. (In fact, while reviewing the performance of APVVP the Ramamurthy Committee had noted how APVVP would not be able to mobilize resources for capital works, and it was indeed a pleasant surprise to see the organization proving the reviewers wrong!).

Additional Resources through User-Fees, Donations and Commercial Complexes

APVVP has had mixed luck in mobilizing resources through user-fees, donations and commercial complexes. The first commissioner, in announcing APVVP's intention to introduce user-fees (for all outpatient services and in inpatient wards) without preparing the public used to free health care and thus inviting widespread criticism, effectively put on indefinite hold any plans to introduce user fees. It was not till 1995, almost a decade later, that the issue of user-charges was again publicly discussed, though it is yet to be implemented.

APVVP's experience with public donations and collections through special schemes like its Annadana and Sada Annadana programs has been very good, and over Rs. 30 million has been raised in the last five years.

On the other hand, the scheme of building commercial complexes never really took off, and APVVP has not so far been able to get any bank or other institutional financing for development of markets and

offices in the prime area occupied by APVVP hospitals in most districts.

Maintenance of Equipment and Buildings

Another area where APVVP has been a huge success is in maintenance of hospital buildings and equipment, largely because of the innovative administrative and financial reforms that were introduced in the organization. Delegation of financial powers to hospital superintendents and technical sanction to hospital engineers effectively reduced the time taken for processing paperwork and gave a greater sense of responsibility to hospital superintendents.

Quality of Care

While no formal and structured analysis of the impact of autonomy on quality of care and patient satisfaction was done in this study, one can infer the many improvements that follow better equipment, better administrative and financial organization, streamlining of posts and recruitment methods, etc. Similarly, it is difficult to conclude that any positive changes could have come about in the attitudes of physicians and other medical staff, for the autonomy has meant little or nothing to them. APVVP has tried to introduce some kinds of financial incentives but, with the exception of permitting the physicians a part of the fee for physical examination, there has been progress on this issue.

Conclusion 2: Because of its autonomous nature, APVVP has been very successful in mobilizing institutional finance and resources from public. Autonomy has also been useful in ensuring gains on other fronts, like maintenance of equipment and buildings, and to some extent, quality of care. However, autonomy has meant little or nothing to the staff employed in the organization, and has not been accompanied by any incentives for those working in the organization.

6.3 Autonomy of APVVP Versus Autonomy of the Individual Hospital

APVVP effectively replaced that branch of the Department of Health that was entrusted with the administration of hospitals, and thus brought in autonomy in the body managing public hospitals. However, there is no evidence to indicate that substantial autonomy

has percolated down to the level of the hospital, even though individual hospital autonomy is not precluded in the Act. The delegation of financial and administrative powers to the hospital superintendent does provide them with some element of decision-making, but as compared to the overall size of hospital operations this delegation has not been fairly significant.

While it would probably be too specious to contend that as far as the individual hospital is concerned there is no difference between APVVP and other government departments, it is true that many in the hospitals have been quite unaffected by autonomy at the higher level. Whether individual hospital autonomy would improve hospital performance is indeed a moot point; the true potential of autonomy can probably be better realized if autonomy is extended to the lowest operational level.

Conclusion 3: While APVVP, an organization managing over 160 hospitals with a total of over 9,000 beds, is an autonomous organization, the individual hospitals, that are discrete units by themselves, are not autonomous.

6.4 Autonomy: De Jure or De Facto?

We have earlier used the term autonomy to refer to the “quality or state of being self-governing”, and have used the Selznick-Ferry definition of autonomy as being “the degree to which an organization has power with respect to its environment”, so that the greater the power the organization has with respect to its organization, the more autonomy the organization enjoys. We have also referred to the Holdaway et al definition of autonomy as the “extent to which organizationally relevant decision-making is inside the organization”, so that the greater the extent of decision-making within the organization, the higher is the level of autonomy. No matter which definition of autonomy is used, it is clear that we need to distinguish between “what is supposed to be” and “what is” the state of affairs. Law and regulations lay down the de jure position, while the de facto position is brought about by the prevailing circumstances.

The de jure position of APVVP was very clear and consistent since its inception. The organization received its share of funds from the government as a block grant and had almost complete powers in allocating these funds among the various expenditures. APVVP had complete autonomy in purchase of all inputs, including drugs, consumables, equipment, etc. Similarly, APVVP had complete

freedom in administration and financing procedures, and was free to innovate and bring about such changes as were deemed necessary. As regards raising resources, APVVP had complete autonomy in taking such necessary action as was required, except insofar as user charges were considered, where prior government approval was required. Similarly, prior government approval was also required where government guarantee was required for securing any loan.

Perhaps the only area where the de jure position has been somewhat grey has been that of APVVP personnel. At the time of inception it was decreed that all staff of hospitals transferred to APVVP would cease to be government employees and instead become APVVP employees. This meant that the implicit security government jobs offered would no longer be available to these employees. Section 11 (1-a) of the original Act explicitly stated that "with effect from such date as may be prescribed, every officer or employee who immediately before that date was under the administrative control of the Director of Medical Education shall stand transferred to the Commissionerate and shall be deemed to be officer or employee of the Commissionerate." Section 11 (1-d) stated that "every officer or employee who immediately before that date that [prescribed date] was under the administrative control of such dispensaries, district headquarters hospitals, and non-teaching hospitals shall stand transferred to the Commissionerate and shall be deemed to be an officer or an employee of the Commissionerate." However, within the first year itself the Act was amended, and the clauses 'transferred to' and 'be deemed to be an officer or employee of the Commissionerate' were substituted by the clause 'every officer or employee who, immediately before that date, was working in such dispensaries and non-teaching hospitals shall continue to work on deputation with the Commissionerate till such time he exercises the option to be absorbed in the service of the Commissionerate'. The amendment thus allowed the employees the choice of absorption in APVVP or continuation as government employees.

Following the conceptualization of autonomy in the Guidelines (Chawla and Berman, 1995), the de jure position of APVVP can be described as follows:

The de facto position, however, has varied considerably, depending a lot on who the commissioner and the board members have been. One of the major factors affecting the de facto situation is the conflicting situation in the composition of the board. Both the Commissioner and the Secretary of the Department of Health, Government of Andhra Pradesh, are members of the board, and

even though the Commissioner is usually junior in service to the Secretary, she/he is the Chairperson of the Board. The de facto situation thus often reduces to the Secretary running the board meeting instead of the Commissioner, which can potentially weaken the position of the latter considerably. With the exception of one Commissioner who has been from the administrative cadres, all other Commissioners have been employees of the Health department, of which the senior-most officer is the Health Secretary.

Table 6.1

De Jure Hospital Autonomy of APVVP: Nesting Level 1

Territorial Authority		***National Government***	***State Government***	***Local Government***	***Non-Government***
<---------- Global Continuum ---------->					
Centrally Controlled	P o w e r C o n t i n u u m				
High Supervision/ Control					
Low Supervision/ Control			High Autonomy		
Total Independence					

This conflict is not confined to the board meetings alone. There is a strong tendency among many junior officers to “play it safe” by seeking concurrence from one level higher for almost all matters including those decreed by the Act to be in the domain of the junior officer. Consequently, there is a tendency among APVVP commissioners to refer even minor matters to the Health Secretary for approval, especially those that involve financial expenditure. Autonomy as granted by the Act is thus frittered away in deference to caution and a conservative interpretation of rules, and the organization starts functioning like any other government department.

Table 6.2

De Jure Hospital Autonomy of APVVP: Nesting Level 2

Degree ------> Function		***No Autonomy <----------> Full Autonomy***					
Administration						very high	
Finance	Recurrent					very high	
	Capital					very high	
	Resources					very high	
	Revenue					very high	
Inputs	Personnel			medium			
	Drugs						full
	Equipment						full
	Supplies						full

This phenomenon has been observed during the tenure of many Commissioners, which leads one to conclude that the extent and nature of de facto autonomy has in fact been rather limited.

In situations such as this, the de facto situation has often appeared to look somewhat as under:

Not all Commissioners have thus given away autonomy, however, and the real situation has in fact been somewhat between the two situations discussed above.

Conclusion 4: While the legal framework for autonomy has been in existence since the earliest days of the organization, de facto autonomy has tended to be influenced by a host of factors including the relative situation and strength of the Commissioner vis-a-vis the Health Secretary. In effect, the organization has been as autonomous as the Commissioner has been able to make it or as much as the Health Secretary has permitted it to be, or some combination of both.

Table 6.3

De Facto Hospital Autonomy: Nesting Level 1

Territorial Authority		***National Government***	***State Government***	***Local Government***	***Non-Government or Private***
<---------- Global Continuum ---------->					
Centrally Controlled	Power Continuum				
High Supervision/ Control			Low Autonomy		
Low Supervision/ Control					
Total Independence					

Table 6.4

De Facto Hospital Autonomy: Nesting Level 2

Degree ------> Function		***No Autonomy <----------> Full Autonomy***					
Administration			Low				
Finance	Recurrent		Low				
	Capital		Low				
	Resources		Low				
	Revenue		Low				
Inputs	Personnel		Low				
	Drugs		Low				
	Equipment		Low				
	Supplies		Low				

7. Conclusions

In summary, it appears that creating APVVP and granting it autonomy has been successful in many respects, although many of the potential benefits are yet to be realized.

The model used by the Government of Andhra Pradesh to grant autonomy is based on creation of a parastatal organization and giving that organization autonomy, as distinct from giving autonomy to each and every hospital. APVVP effectively replaced that branch of the Department of Health that was entrusted with the administration of hospitals. However, there is no evidence to indicate that autonomy has percolated down to the level of the hospital. The delegation of financial and administrative powers to the hospital superintendents does provide them with some element of decision-making, but as compared to the overall size of hospital operations this delegation has not been quite insignificant.

This model has had many advantages. First, the government has had to deal with only one organization instead of 160 different autonomous hospitals. Second, the government has been able to effectively monitor flow of funds, appointments, staff remuneration, etc. fairly closely. Third, when this autonomous organization has worked under the general direction of a dynamic leader and supportive board, it has seemed to perform very well. Fourth, the fact that there is only one organization has effectively led to the system of one-window for all inputs, processes and outcomes.

At the same time, there are many disadvantages associated with a single organization. First, the hospitals continue to be non-autonomous, and thus the gains from autonomy may well not have been fully realized. Second, it has been easy, both administratively and politically, for the government to exercise a great deal of control over the single organization, so that the effective autonomy has been diluted in several instances. Third, the organization has experienced many periods of ineffective leadership, as a result of which the performance of all the hospitals has been less than optimal. As a result of all these factors, on several occasions and for long stretches of time APVVP has enjoyed little autonomy despite the legal and

administrative framework provided by the Act. APVVP has not always been able to take independent decisions about its finances and day-to-day administration, and has often been tied down by bureaucratic and hierarchical constraints that are usually typical of government organizations. While the legal framework for autonomy has been in existence since the earliest days of the organization, de facto autonomy has tended to be influenced by a host of factors including the relative situation and strength of APVVP management vis-a-vis the government. In effect, the organization has often been only as autonomous as the management has been able to make it or as much as the government has permitted it to be, or some combination of both.

On the more positive side, APVVP has had commendable success in many managerial decision-making situations. Under APVVP the down-time due to equipment repair and overhaul came down from over six months in most cases to less than two weeks. This reduction in downtime on equipment has been the direct result of simplified and result-oriented policies on repairs and maintenance.

APVVP introduced several innovative ways of raising resources to augment funds it receives from the government. These include charging user fees, the Annadana schemes, donations, lotteries, and external assistance. User fees raised only Rs. 45 million (between 1988 and 1994). Donations proved to be highly successful, and raised substantial funds (over Rs. 100 million between 1988 and 1994) from the general public. The Annadana schemes also did well, and mobilized over Rs. 2 million (between 1988 and 1994) in the form of contributions from the general public toward the cost of food.

Probably the biggest achievement of APVVP has been the approval in 1993 by the World Bank for a loan of US$133 million for a special project that will help APVVP and the government of Andhra Pradesh finance activities that will strengthen institutions for policy development and implementation capacity, and improve quality, access, and effectiveness of health services at district area and community hospitals.

APVVP has taken many steps to improve the preparedness of hospitals to meet emergency situations. These include identification and improving availability of equipment required for emergency services, like oxygen cylinders, suction apparatus and refrigerators. When APVVP took over the hospitals, a large number of facilities did not have adequately functioning water supply systems. APVVP improved water supply in all 162 hospitals by installing borewells,

augmenting municipal sources, overhauling existing water distribution systems, adding overhead storage tanks, and providing safe drinking water for patients. APVVP also adopted a multi-pronged strategy to address power shortages, and installed direct feeder lines and standby generator sets, changed the electrical wiring in old hospitals, and provided an adequate number of fans to each hospital. Moreover, APVVP constructed several additional wards, outpatient centers, rooms for diagnostic services, and areas for patients' attendants.

APVVP has taken many innovative steps to manage and control funds at its disposal. First, APVVP reorganized the classification of expenses to follow a more functional categorization. Second, APVVP created a concurrent audit system and an internal audit wing. Finally, APVVP delegated a number of financial powers to the hospital superintendent and district coordinators, especially for minor and routine repairs. APVVP initiated several steps for effective inventory control. In the critical area of supply of drugs, APVVP introduced monthly central monitoring of stock for about 55 drugs. New rules and procedures were introduced, which required the purchasing officers to take the existing stock account before placing fresh orders, which restricted purchase of most items for one quarter at a time only. These improvements in financial and inventory management were slow to materialize, but once the changes were set in motion they proved to be very effective. The initial reluctance of the staff to change from their well-entrenched habits from government days was overcome over time and through a process of training, and better and more functional systems of bookkeeping, accounting, record-keeping, inventory control, purchases, and computerization were put into place.

In many other cases the success of APVVP has been rather limited. Even though the pattern of government funding changed from line grants to block grants after autonomy, the government continues to retain substantial control over how funds are allocated. As a result, no major innovations and improvements in spending have happened as a result of autonomy. Even the planning and budgeting processes have not changed much, despite the formal autonomy that APVVP enjoys in this regard. Allocations to the different heads of account and expenditure continue to be made on a historical basis, and no long-term plans have been drawn up for any major changes in process or focus of the organization.

APVVP's autonomy vis-a-vis personnel matters has been rather limited, as a result of which the management has not had the

flexibility of appointments and dismissals. With the exception of some rationalization of posts (256 posts were declared non-essential, and were abolished) no innovations have been brought about in creation and filling up of vacancies. APVVP continues to follow the earlier norms set by the government that are the same for other hospitals directly managed by the government. No system of incentives has been put into place following autonomy, and despite the enunciation of a new corporate mission, there has been no change in attitudes and actions of the employees of the organization, to whom autonomy has not meant much.

In sum, it appears that because of its autonomous nature APVVP has been very successful in mobilizing institutional finance and resources from public. Autonomy has also been useful in ensuring gains on other fronts, like maintenance of equipment and buildings, and to some extent, quality of care. However, autonomy has meant little or nothing to the staff employed in the organization, and has not been accompanied by any incentives for those working in the organization.

The achievements of APVVP cannot unequivocally be attributed to the enabling environment created by the autonomous nature of the organization, since leadership also appears to have played a critical role. APVVP enjoyed the same autonomous environment since its creation, and while some commissioners could bring about many significant changes, others could not. Most of the changes and achievements can be attributed to the leadership of just one commissioner, and it is a moot point whether these achievements would at all have been possible had it not been for the autonomy that APVVP enjoyed. It is evident that autonomy alone has not been able to guarantee the best results, and has remained highly vulnerable to leadership failures.

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Annex 1

Table A.1.1

Performance Reporting Format for Community Hospitals

Code	*Name of Hospital*	*Period of Reporting*

IP/OP Data

Out Patients			*In Patients*							
New Cases	*Repeat Cases*	*Total*	*Admissions/1*			*Discharges*			*Deaths*	*IP Days/2*
			R/3	*D/4*	*T/5*	*R*	*D*	*T*		

1/ Normal, healthy new born babies should not be counted as admissions, but babies requiring special care should be included among admissions.

2/ Cumulative In Patients Days i.e. sum of the daily census of occupied in patient beds, including extra beds, floor beds etc. Healthy new born babies are not included. Babies requiring special attention are counted.

3/ R: Referred patients. All admissions based on specific referral by any health care delivery institution within the area of operation of the hospital, except those located at the headquarters of the same hospital, for care in a higher level hospital.

4/ D: Direct patients. All admissions other than admissions.

5/ T: Total number of patients

Table A.1.2

Clinical Events Data

Major Surgeries/1	*Minor Surgeries/2*	*Deliveries*	*Emergency (Casualty) Cases/3*	*Emergency (Casualty) Admissions/4*

1/ All operations done under general or spinal anaesthesia are generally classified as major. All operations involving opening of peritoneal cavity or such other body cavity are also classified as major irrespective of the type of anaesthesia (e.g., tubectomy or hernia under local anesthesia).

2/ All surgeries done without any anesthesia or under local anaesthesia are generally classified as minor except those involving opening up of peritoneal or other body cavity or any major organ.

3/ All cases received by the casualty during the current reporting period irrespective of whether they were disposed off as Out patients or were admitted. That means all casualty OPs as well as IPs. Though these cases must have been included in the OP/IP data they are to be shown here again.

4/ Admissions done in the casualty or as emergency cases are only shown here. These admissions are included in the overall admissions under OP/IP data and are to be shown here again.

Table A.1.3

Diagnostic Events Data

Imaging			***Electro-medical***		***Laboratory***			
X-Rays	Ultra-sound	Other	ECG	Other	Biochemistry	Pathology	Microbiology	Other

Table A.1.4

Medico Legal Services

Medico Legal Cases	***Medico Legal Cases***	***Evidence/1***

1/ When any of the hospital staff are sent to appear before a court of law or such other judicial quasi judicial body the event is counted as one evidence for each staff per deputation, irrespective of whether the court of law actually examines the hospital staff.

Annex 2

Table A.2.1

Performance Reporting Format District and Area Hospitals

Code	*Name of Hospital*	*Period of Reporting*

Out Patients Data

Department / Speciality	*New Cases*	*Repeat Cases*	*Total*
Medical			
Surgical			
Obstetrics & Gynecology			
Orthopaedics			
Others including eye			
All (Total)			

Table A.2.2

In Patients Data

Department / Speciality	*Admissions/1*			*Discharges*			*Deaths*	*IP Days/2*
	R/3	*D/4*	*Total*	*R*	*D*	*Total*		
Medical								
Surgical								
Obs. & Gyn.								
Orthopaedics								
Others Including Eye								
All (Total)								

1/ Normal , healthy newborn babies should not be counted as admissions, but babies requiring special care should be included among admissions.

2/ Cumulative In-Patient Days i.e. sum of the daily census of occupied in patient beds, including extra beds, floor beds, etc. Healthy newborn babies are not included . Babies requiring special attention are counted.

3/ All admissions based on specific referral by any health care delivery institution within the area of operation of the hospital, except those located at the headquarters of the same hospital, for care in a higher level hospital.

4/ All admissions other than referral admissions.

Table A.2.3

Clinical Events Data

Major Surgeries/1	*Minor Surgeries/2*	*Deliveries*	*Emergency (Casualty) cases/3*	*Emergency (Casualty) Admissions/4*

1/ All operations done under general or spinal anesthesia are generally classified as major . All operations involving opening of peritoneal cavity or such other body cavity are also classified as major irrespective of the type of anaesthesia.

2/ All surgeries done without any anaesthesia or under local anaesthesia are generally classified as minor except those involving opening.

3/ All cases received by the casualty during the current reporting period irrespective of whether they were disposed off as Out patients or were admitted. That means all casualty OPs as well as IPs. Though these cases must have been included in the OP/IP data

4/ Admissions done in the casualty or as emergency cases are only shown here. These admissions are included in the overall admissions.

Table A.2.4

	Diagnostic Events Data								
	Imaging			***Electro-medical***		***Laboratory***			
	X-Rays	***Ultra-sound***	***Other***	***ECG***	***Other***	***Pathology***	***Bio-chemistry***	***Micro-biology***	***Other***
OP									
IP									

Annex 3

Table A.3.1

Performance Reporting Format for Teaching Hospitals

Code	*Name of Hospitals*	*Period of Reporting*

Out Patient Data

Department, Specialty	***New Cases***	***Repeat Cases***	***Total***
Medicine & Allied Specialties			
General Medicine Pediatrics			
Neurology			
Endocrinology			
Gastroenterology			
Nephrology Cardiology			
Dermatology			
S.T.D.			
Psychiatry			
Infectious Diseases			
Surgical & Allied Specialities			
General Surgery			
Orthopedic Surgery			
Neurosurgery			
Cardiothoracic Surgery			
Urology			
Plastic Surgery			
Pediatric Surgery Obs. and Gyn.			
Others			
Eye			
ENT			
Dental Others			
All(Total)			

Annex 4

Table A.4.1

Standard Format Analysis to Accompany Performance Budget of a Group of Hospitals

Summary of Hospital Capacity: Annex 1

Hospitals under APVVP

Type	*Bed Capacity*			*No. of Institutions*	*Total Beds*
	Minimum	*Maximum*	*Mean*		
All					

Table A.4.2

Global Indicators of Hospital Activity

Global Indicators of Hospital Activity in ------- 1 for the Year -------19

Hospital Census Aggregate	*Indicator*	*Performance*		
		Minimum	*Maximum*	*Overall*
Out Patients	Turnover Rate			
Admissions	Bed Occupancy			
Discharges	Average Length of Stay			
Deaths	Outpatients per Bed Day			
Cumulative IP Days				

1/ Mention here the number of institutions with complete reports of data based on which the above information is compiled.

Table A.4.3

Combined Utilization and Productivity (CUP) Analysis

Distribution of Hospitals According to Combined Utilization and Productivity Sectors (PS)

PS	***Definition***	***No. of Hospitals***
1	Both turnover rate (TR) and bed occupancy (BO) are below average	
2	Turnover rate more than average but bed occupancy is less than average	
3	Both turnover rate and bed occupancy are above average	
4	Turnover rate is less than average and bed ocupancy is more than average	

Table A.4.5

Identification of Tail End Hospitals According to Cup Sector Analysis

Number of Hospitals in Each Tail End Group Among the Hospitals

Tail End Group	***No of Hospital***
Low turnover and low occupancy	
High turnover and low occupancy	
High turnover and high occupancy	
Low turnover and high occupancy	

Table A.4.6

Distribution of Hospitals According to Laboratory Test Rates

Distribution of Hospitals According to Laboratory Test Rates, Imaging, Electro-Medical Tests, etc.

Performance Status	***Lab Test Rate***	***Imaging & Electro-Medical Test Rate***
0 Test Rate		
Positive Test Rate		
All		

Table A.4.7

Distribution of Hospitals According to Emergency Services Index Group

Emergency Services Index	***No of Hospitals***
0	
E2	
>2 E 10	
>10 E 20	
>20	