CHAPTER - IV

WORKING OF T.B.P. CADA

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The purpose of this Chapter is to understand how the T.B.P. CADA performed the functions assigned to it. The Chapter also reveals the difficulties and inbuilt constraints experienced by the different functionaries in the performance of their tasks. In other words, this chapter portrays broadly the working of T.B.P. CADA.

THE COVERAGE :

The Tungabhadra command encompasses 597 villages of Koppal, Deodurg, Sindhanur, Gangavathi, Manvi, Raichur, Talukas of Raichur district and Siruguppa, Sandur, Hospet, Bellary Talukas of Bellary district. Roughly more than 11 Lakhs people are benefitted by this project. However, some lands may get water and some lands may not get water due to one reason or the other. The lands which are assured of water supply have to pay the water tax. Such lands are to be localised. Such lands which do not get water are to be delocalised so that water tax will not be recovered. There are committees for localisation and delocalisation at taluk level.[1] The taluk level committees has to recommend the case to Executive Engineer (I.D.) for verification and recommendation. The Executive Engineer put up the cases to the

Superintending Engineer. Such recommended lands by the Superintending Engineer will be localised or delocalised. The development of the Command Area as at the end of 1996 as follows :

1. Cultivatable Command Area	5.29 Lakhs Hects.
2. Ultimate Irrigation potential	3.63 Lakhs Hects.
3. Potential created	3.52 Lakhs Hects.
4. Potential utilised	3.45 Lakhs Hects.

This suggests that though there is a large cultivable Command Area of 5.29 Lakh hects. and ultimate irrigation potential is of the order of 3.63 Lakh Hects potential created is only 3.52 Lakh Hects. Even this much of potential is not totally utilised as the cropped area during 1995-96 is only 3.45 Lakh Hects. In other words, the potential utilised fall short of 7,000 hects. This points out that though the Command Area Authority has completed some 17 years, it is not able enough to handle the task efficiently.

MAJOR ISSUES IN T.B.P. :

The soils of Tungabhadra Command Area comprises of Black Cotton soils to the extent of 80% and Red Soils to the extent of 20%.

The PH ranges from 8 to 9 which shows high salt contents to soil solution.

Soon after commissioning of the Project water was let into the canals and Distributories. Farmers started cultivating Paddy in upper reaches because of abundant availability of water and also started unauthorised cultivation of Paddy season after season. Farmers are not adhering to the cropping pattern now given. They are violating the cropping pattern. For e.g. the total area under paddy fixed is 31,329 hectares as per cropping pattern but the actual area that is being covered now is nearly 1.00 lakh hectares.[2] Therefore, it is found very difficult into regulate cropping pattern.

Further, the seepage of water from canals, Distributories, Sub-Distributories, unauthorised irrigation, violation of cropping pattern and choking of natural drains and nalas have led to formation of waterlogg, saline and Alkaline soils. Thus about 54,000 hectares are affected, out of which 21,202.86 hectares are waterlogged, 26,018.59 hectares saline area and 6,193 hectares Alkaline area.[3]

For the sake of convenience T.B.P. CADA has grouped its activities into four major groups. They are : (I) agricultural, (II)

engineering, (III) ground water studies and (IV) co-operation. Now, let us examine how T.B.P. CADA performed these activities.

I. AGRICULTURAL ACTIVITIES :

A. On Farm Development :[4]

Agricultural Development is not merely increasing the magnitude of production or growing a variety of crops, but also its main aim and objective is the socio economic development of the people. Development of the people implied generating in them the awareness of their surroundings, identification of opportunities available for better life to fulfill their needs, goals and aspirations. An attempt was made in this old and challenging project like Tungabhadra by focussing attention on the deleterious consequences by uncontrolled irrigation, thereby showing the way for overcoming the problems of unauthorised, irrigation, waterlogging, tail end problem etc., by executing various developmental programmes in an integrated manner. The programmes, that contributed for effective land and water management usher in a new era of technological change and prosperity to this backward region.

As a part of programme of increasing production of pulses, oil seeds, agricultural scientists have opined that pulses respond more to phosphorous and sulphur. Accordingly certain demonstrations were

[4]

tried and conducted during 1981 and onwards. In order to improve soil fertility green manure and also super digest compost programmes were taken up. As a result, there is increase in yield. Demonstration trials[3] with TUR PT 221, BENGALGRAM, SAFFLOWER, SUNFLOWER have shown an increasing yield, though such increase differs from one pulse to another pulse. In the same way green manure seeds were distributed among Scheduled Caste, Scheduled Tribes and Small Marginal and other farmers of the Ayacut area. Super digest was also supplied for preparation of super digest compost.

Application of zinc, iron and a combination of both elements have increased the yield on maize. For this purpose the new agricultural extention services, known as Training and visit system has been introduced in the Command Area from 1979. For the purpose of field demonstration activities under Central Sector Schemes since 1979 a large sum of Rs.41.88 Lakhs were provided. Since 1979 to 1997 a total of 200 demonstrations were prepared to be held and 326 training programmes were conducted. A total amount of Rs.18.62 lakhs were spent and only 139 training programmes were actually held.[5]

B. Adoptive Trials[6] :

This is a Centrally sponsored scheme. The objective is to introduce proved technology to enable farmers to adopt the same to increase production in the Command Area. The most chronic problems that have defied solution for over two and half decades are :

1. Wastage and over use of water
2. Waterlogging and salinity

To solve the problem of wastage and over use of water adoptive trials have been laid out under On Farm Development every year.

Regarding the problem of waterlogging and salinity, some modifications have been made in the spacing of laterals at the instance of Dr. Bhattacharya, Water Management Specialist, Indian Council of Agriculture Research, New Delhi.

Certain problems are being faced by farmers in adopting the new technology evolved by the scientist of University of Agricultural Sciences. After considering these problems, TBP-CADA has proposed eight Research Programmes under the Project Studies and Research. The schemes are entrusted to the scientists of the U.A.S., Dharwad. During the year 1990-91, an amount of Rs.1.50 lakhs was provided for these studies.[7] The scheme include eight ongoing studies which are

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spread over a period of 4 years commencing from 1990-91 to 1993-94 for establishment of the findings.

PROJECT STUDIES AND RESEARCH:

C. Studies Undertaken :

1. Development of Improved Cotton varieties/hybrids for T.B.P. area.
2. Genetic Improvement of Groundnut yields in TBP area.
3. Improvement of Soyabean yields in TBP area.
4. Multiple cropping system in red and black soils of TBP area.
5. Agro-forestry systems suited to TBP Command Area.
6. Effect of recycling of cotton staks on soil properties
7. Inspect pest Management in groundnut.
8. Inspect pest Management in Cotton.

However, it is interesting to note that during 1992-93, no amount was released to the Agriculture University, Dharwar as it has not sent the accounts for the amount released for earlier year.[8] In the same way during 1996-97, seventeen studies were entrusted to the University on varietal trails on Groundnut, Cotton, Soyabean, Maize, sunflower, integrated post management on Cotton and Groundnut crops. Studies on fertility status of Soil, Agro-forestry System, Multiple Cropping System,

Prawn Culture, performance of Deoni-Holessein cross breed. Cultivation of vegetable crops, studies on silkworm rearing, and optimum use of water. The studies were continued further.

Some other scientific studies conducted for the purpose of agriculture development in T.B.P. Command Area are as under :

AGRI-SILVI-HORTI CROPPING PATTERN :

Studies re-conducted to find out an optimum combination of Annual Agriculture crops and beneficial horticulture and Forest species by maintaining some strips of economic and beneficial tree crops. This would ensure steady income to the farmers, besides providing timber, fruits and fodder. Since the species involved are of varied nature, the study would be spread over for another 2 to 3 years to evolve definite recommendations for the benefit of farmers. The budget allotment for 1986-87 was Rs.38,000/-.

COTTON RESEARCH PROJECT :

This project was taken up during 1985. The objective is to evolve high yielding varieties resistant to insect pests and diseases, which are suitable to TBP area. During the year under report 12 experiments were conducted. A general observation has indicated that hybrids and G-barbadense are most susceptible for white flies. G-

hirsuitumas most tolerant and in the presence of both these species G-arboreum and G-herbeceum. Initial results have shown that they possessed very high yield potential of 33-40 quintals per hectare. Leaves never turned red and boll opening was normal. Rs.1.00 lakh was allotted to the project and the full amount has been utilised.

Investigation on management of insects and pests :

(Management of Brown hopper in paddy) :

The objective of this scheme is to evolve suitable chemicals suitable for the control of brown hopper on paddy. In the light of the rampant occurrence of brown plant hopper in the TBP area, studies were concentrated on the management of BPH only. A total number of six experiments on the investigation on various aspects of BPH were conducted out at A.S.R. Siruguppa during 1986-87. A sum of Rs.30,000/- was allotted to this research project.

Chemical Weed Control :

The objective of this scheme is to evolve effective control measures to prevent weed spread. The following trials were conducted:

1) Chemical weed control in Bhendi.

2) Chemical weed control in mixed crop Sorghum + Tur.

3) Chemical weed control on Vegetables.

4) Studies on leaf reddening in Cotton Genotypes.

The bio chemical analysis is still under progress. The use of weedicide treatment resulted in good yields. Besides demonstration of the control of Typha and weed control in groundnut crop were taken up in Left Bank Canal during 1986-87. The Budget allocation was Rs.35,000/-.

SUNFLOWER SEED PRODUCTION :

Failure of Cotton reduced yields of groundnut, problems of water reach and availability of water at tail end points and with good price structure for oil seeds, sunflower has become a champion crop of the project area during the year 1986-87. It has almost covered one lakh hectare in the Command Area.

There is a great demand for the seeds of Sunflower in Command Area. Hence it was felt necessary for the production of adequate quantity of seeds. This was programmed on an area of 4 hectares including **A, B** and **R** lines by the regional research station Raichur. It is estimated to produce 1500 kg. of A line, 500 Kg. of R line, with which it is possible to cover an area of 750 acres of hybrid seed production. This hybrid seed production expected to yield 3250 quintals of Hybrid seed to cover an area of 5,000 acres in the Command

Area. A sum of Rs.45,000/- was allotted to this project during the year 1986-87.

MICRONUTRIENT STUDIES :

Micro-nutrients are equally important as those of Macronutrients for the growth and good yield of crops. The studies of soil profile have indicated that the soil properties would not be damaged much due to irrigation. The experiments have shown that the soils are deficient in Micronutrients. Demonstrations were conducted in Manvi, Sindhanur and Kurgodu area to study the Micronutrient deficiency and methods to solve these problems. Further studies are carried out to work out the rates and modes of these Micronutrients for each set of crop rotations. The budget allocation for this project was Rs.35,000/-.

From 1979 to 1997 under Central Sector Scheme an amount of Rs.41.91 lakhs were provided for 75 studies. However, till now 61 studies were conducted by spending a total amount of Rs.31.27 lakhs. CADA has also acquired three scientific instruments at a cost of Rs.7.26 lakhs for its use.[11]

IMPROVED IMPLEMENTS :[12]

Under this project, two experiments were conducted i.e. (1) Development and evaluation of improved threshers of sunflower crop

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(2) Development and evaluation of improved seed drills for groundnut crop.

Study was undertaken to develop and evaluate modified and improved thresher for sunflower crop. The machine was demonstrated to farmers in Manvi and Rampur village of Raichur Taluk. The general opinion of the farmers is that its performance was better than commercial thresher as it operated with minimum seed damage. The results showed the machine can be operated with minimum consumption of fuel and labour in the farmers field. A total quantity of 223.00 quintals of seed grown on 52.00 acres was threshed.

The demonstration trials of the two row seed drill for groundnut crop was conducted in the farmers field at Manvi and Karadigudda village of Manvi taluk. The farmers are of opinion that the drill needs to be little more heavier to give deeper penetration. Further trials are planned for the ensuing season in 1987-88. The budget allotment for this project was Rs.17,000/- and the expenditure on the project was Rs.16,000/-.

Over the years the main focus of T.B.P. CADA is on the On Farm Development works which is aimed at efficient utilisation of irrigation water. A number of post irrigation, waterlogging, salinity and

alkalinity problems were also faced by the CADA. Already an estimated area of 53000 hectares is affected by waterlogging salinity and alkalinity. This has been assessed on visual inspection.

WATER LOGGING, SALINITY AND ALKALINITY STUDIES[13]:

During the year 1986-87 Mudatnur village in Siruguppa Taluka, Bellary District was taken up for study of waterlogging salinity and alkalinity problems. Mudatnur village is mostly covered by medium deep black soils. The waterlogging is affected in the eastern part of the village where a nala flows and joins river Tungabhadra. The waterlogging in these area is ascribed to the lack of proper drainage condition in the natural streams.

Under Central Sector Scheme to reduce the problem of water logging drainage channels were proposed constructed for an area of 2,336 hectares since 1979 with a cost of Rs.76.52 lakhs. However, till 1997 drainage channels were constructed for only 1,481 hectares at a cost of Rs.43.52 lakhs.[14]

No scientific analysis by way of determining ph. Electrical conductivity and percentage of exchangeable sodium etc. has been carried out. If such analysis were to be made, the area so affected could

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be lower. A pilot project study with technical and financial assistance from the Netherlands Government is initiated in the year 1986.

Efforts were also made to increase the carrying capacity of Left Bank Canal to push through water to tail end area. Since 1988 onwards, working close association with Irrigation Department, survey numberwise details were obtained and CADA was able to prepare plans and estimates for the same in a phased manner.

Lands have been developed under Contour Border strip and other methods. However, till 1981-82, the CADA did not have the per unit cost for soil survey. Lands could not be developed fast mainly due to lack of finance and unwilling and ineligible farmers.

D. Land Reclamation[15]

Farmers are violating cropping pattern and utilising unauthorised irrigations. Also because of seepage from canals, distributaries, chocking of natural nalas, have lead to formation of water rigged, saline and alkaline areas. Thus about 54,000 hectares lands are affected. To reclaim the affected area and to prevent further spread of seepage, demonstrations were held at several places like Vannur and Banapure, Kurugodu, Karur etc. Since 1981-82 these demonstrations have served the farmers of the Command Area in tackling hazards of seepage,

TABLE NO. 4.1

Details of land reclamation taken up during the year 1990-91 is as under:

Sl. No.	Block	Area reclaimed (in Ha.)	Amount spent (Rs.)
1.	Bagalwad-II.	5.41	52,051.00
2.	Bagalwad-I.	11.22	1,11,279.00
3.	Chagbhavi-II.	14.69	1,18,939.00
4.	Bagalwad-V.	12.39	1,25,398.00
5.	Seckal-I.	8.97	75,727.00
6.	Bagalwad-III.	11.83	43,678.00
7.	Hire Kotankal-VI	11.83	1,09,547.00
8.	Gundur-I.	18.89	1,68,932.00
9.	Hosalli-IV	7.83	73,438.00
10.	Hoslapur D-1.	8.11	77,927.00
11.	Hosallik-K-1.	6.83	65,920.00
12.	Gundur-II.	9.79	72,956.00
13.	Krishnapur-I.	8.16	77,018.00
14.	Turvihal-I.	5.53	48,750.00
15.	Siddammanahalli.	19.16	1,52,407.00
16.	Yelebenchi-I.	10.03	72,573.00
17.	Darur-I.	8.17	76,745.00
18.	Darur-II.	8.17	37,677.00
19.	Sanapur-I.	5.97	53,400.00
20.	No.2 Muddapur-II.	7.44	60,305.00
21.	Siddammanahalli-III	12.36	99,072.00
22.	Korlagundi-XI.	4.62	44,895.00
23.	Asundi-II.	4.00	37,022.00

Source, Annual Administration Report for the year 1990-91, P.19.

salinity and alkalinity. Farmers are impressed about the benefits of such works. Farmers involved in this programme have grown better crops on their fields. For example, land reclamation work though sub-surface, drainage methods during 1990-91 cover 23 villages. The details regarding the area reclaimed and amount spent in 1990-91, are as under. (See, Table No.4.1)

Work without maintenance, get damaged. Similarly, soil health needs proper care after executive of works. Quite often, in the initial one are two years, the tile pipes have a tendency to dislocate and give way movement of soil into the pipes and thus render the Drainage scheme ineffective. If these are immediately corrected, the reclamation works give good results. In addition, the salts deposited on the surface in the soil pores are to be leached out by allowing profuse quantity of irrigation. Such trial is taken up based on soil test report and low fertility level has to be increased. In brief the above items of work constitute major planks of follow up action. Based on analytical report and field conditions, this programme was implemented.

In addition to the efforts made above to illustrate the scientific water management in paddy, demonstrations were taken up during khariff and rabi/summer in seed farm Gangavathi and in farmers fields

in collaboration with Department of Agriculture and University of Agriculture Sciences during 1992-93.

To develop the fallow land and make it fit for agriculture a target of 200 hectares was fixed with the financial provision of Rs.40 lakhs. As against this till 1997, 120.31 hectares have been brought under cultivation by spending Rs.22.45 lakhs. similarly for the purpose of land rejunivation and development an amount of Rs.75.76 lakhs for 660 hectares was provided. Out of this amount Rs.75.62 lakhs have been spent and the work was carried out for 596 hectares.[16]

Since the inception of this authority 3,078 hectares (Left Bank Canal 1548.50 hectares, Right Bank Canal 1529.50 hectares) have been reclaimed.[17] When compared to the huge area i.e. 54,000 hectares land reclamation work is not taking place speedily.

In the year 1994-95 under Special Component Plan, to reclaim saline, alkaline and waterlogging areas in the SC/ST farmers fields an amount of Rs. 8.50 lakhs was spent and 52 hectares have been reclaimed benefitting 61 farmers. However, the Government had withdrawn the budget for Special Component Plan and hence it could not be implemented during 1996-97. But the Government had provided Rupees 5.00 lakhs for welfare of scheduled tribe people under Special

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Tribal Programme. During the year 1996-97, 613 plant protection sprayer were distributed free of cost to 613 beneficiaries at the rate of Rs.815.00 per sprayer.[16]

II. GROUND WATER SURVEY AND INVESTIGATION :[17]

A judicious combination of surface and ground water resources in the Command Area offers an ideal solution to the problem of waterlogging a part from providing an assured supply of irrigation water to the tail enders. In such areas it is necessary to provide tube wells/ dug wells which will supplement the water need of farmers. In most of the area the ground water is brackish, but this water is not harmful to the crops. This water can be used directly or used in combination with surface water if available. To achieve this objective, six villages in the tail end areas of the command were selected for geohydrological studies and for exploring the possibility for utilisation of ground water to supplement the irrigation requirements of the farmers of the tail end areas. Under Central Sector Scheme for Ground Water Survey and Investigations in 9,160.16 hectares since 1979 to 1997 an amount of Rs.34.33 lakhs was provided. As against this whole area is surveyed at a cost of only 29.15 Lakhs. In the same way for topographical survey in 3,67,447 hectares an amount of Rs.516.57 lakhs were provided. As

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against this an area of 47,615 hectares area was surveyed with a cost of Rs.370.57 lakhs.[20]

For example an area of about 900 Sq.Kms. covering parts of Manvi and Raichur Talukas in the left bank canal Command Area was surveyed in 1981-82 and mapped on 1-50.000 scale (leaving apart the Command Area of about 100 Sq.Km. which falls under Rajolibanda diversion scheme). The chief rock types in the area include granitic gneisses granites and diorites and predominantly occur as prominent bouldery out crops at Manvi, South East of Rajolibanda and South of Raichur.

Due to the pre-dominant stretch of black soil and presence of highly brackish quality of ground water, only few irrigation wells are noticed. However, the Public Health Engineering Department has drilled many bore wells with fitted hand pumps in the villages. These bore wells, particularly in the saline water areas have helped the villages for other daily requirements.

During the course of survey all the existing irrigation wells and representative public wells were inventoried and other geohydrological data were collected.

In this context, it is noteworthy that in 1981-82 CADA has constituted Taluka Committees for Gangavathi, Sindhanur, Manvi and Raichur Talukas to go into details of the problems of the tail end lands which are not getting water.[21]

A. Specific Investigation :[22]

In order to ascertain the comparative study of ground water occurrence and its quality in different geological and soil conditions intensive survey was carried out in the Uprahal Sub-basin Raichur Taluka, covering an area of about 2059 Kms.

In the year 1984-85 Gotur and Gonal villages in Bellary Taluka and Bagewadi in Siruguppa Taluka in Bellary District and Mukundi in Sindhanur and Ulenur and Bennar villages of Gangavathi Taluka, Raichur Districts are surveyed. All these six villages in Bellary and Raichur District covered by black/cotton soils. It is suggested that in all these villages, there is a need to assess the quality of ground water at deeper level by drilling exploratory bore wells.

B. Recording Of Ground Water Levels :

The periodical recording of ground water levels from the representative observation wells will provide useful data regarding estimation of quantum of ground water recharge from the atmospheric

precipitation, applied irrigation water and canal see page. The details of daily weekly fortnightly and monthly recording of water levels from observation dug wells and bore wells in the Command Area were conducted since 1980. In 1981-82 in fifteen villages of Bellary and Raichur districts recording of ground water level were conducted. In the same year 151 water samples were collected from various sources for studying the chemical quality and suitability for irrigation purposes in the Command Area. They were analysed by the laboratory attached to this unit office. The chemical analysis data was utilised to prepare the ground water quality maps. Water samples were collected and analysed in the District Soil Testing Laboratories of Bellary and Dadesugar. Based on these analysis ground water quality map of the Command Area is being prepared.

Ground water surveys for conjunctive utilisation of ground water for supplementing canal water deficiency in the tail end areas were taken in Madlapur and Katarki villages of Manvi Taluka of Raichur District in the Left Bank Canal Command Area.[28] Besides the routine monitoring of Static Water Level, in different parts of the Command Area to study the behaviour of water table in the Command Area studies were taken up. Geohydrological survey was conducted in Mudlapur and Katarki villages situated to the South-East of Manvi, the north of

Tungabhadra River to study ground water potentiality of the area. The chemical quality of ground water in the Madlapur area is found to be sufficiently good and suitable for irrigation. The pumping and recovery tests conducts in some of the dugwells show 75 per cent evaporation per day indicating good potentiality of the wells in particular and area in general. Each wells is irrigating about 5 to 8 Acres of land. The common crops grown are paddy, groundnut, pulses etc.

Taking into consideration the above observations it is suggested that, the Northern, North-West and North-Eastern Zones which are feasible can be developed by way of dugwells, dug-cum-bore wells and bore wells.

Similarly, the geo-hydrological survey of Katarki village was conducted to identify the ground water potential zones for conjunctive use.

Irrigation bore wells are seen mainly in the North-Eastern portion of the Katarki village area. The area show good potentiality as observed from the existing dug and bore wells. Bore wells are of very shallow depth ranging from 10 to 15 meters. They are giving high yield and irrigating about 10-15 acres of land. The pumping water level is found to be less than twelve meters since the bore wells are operated by

centrifugal pumps. The quality of water is also observed to be good for irrigation. The common crops of the areas are paddy, sugarcane, groundnut and pulses.

It is suggested that the bore wells should be drilled to a depth of 25 to 30 meters for still better yield. The tail end Madlapur and Katarki villages with good ground water potential deserves due attention for ground water development to bring more area under irrigation. The excess water flowing in the Manvi nala may be used by digging shallow infilteration wells or by providing individual lift irrigation schemes to the farmers of the area.

C. Static Water Level Measurements :

The periodic monitoring of Static Water Levels in selected observation wells is an important work to study the behaviour of water table in the Command Area during different seasons. Accordingly, the measurement of monthly and seasonal (pre and post-monsoon) Static Water Levels in the prescribed observation wells were continued. A total number of 125 pre-monsoon and 125 post-monsoon water levels were measured respectively in the prescribed 125 seasonal observation wells distributed in Bellary and Raichur Districts of the Command Area.

The fluctuation of ground water levels in the observation wells prior to monsoon and after the monsoon gives valuable data on annual ground water recharge conditions. To monitor the seasonal fluctuation of ground water table in the Command Area 200 wells were being monitored and the water levels are measured during the pre and post monsoon seasons. The data collected over a period of several years provide information on regional behaviour of the ground water table in the Tungabhadra Command Area. The studies have showed the existence of regionally extending zones characterised by low water table conditions.

Earlier static water levels both in dug wells and bore wells were recorded once in two months. However, in 1992-93 the Director, Department of Mines and Geology instructed that recording should be done every month.[24] As a result quarterly and annual hydrographs are prepared Taluka wise and by these maps the ground water fluctuation can be decided talukawise.

The fluctuation of ground water also indicate conversion of minerals in soil contents.

In 1992-93 for the first time the shallow tube well programme was included in CADA.[25] The advantages of the same are: 1. The

intention to drill shallow tube wells is to separate see page from the Agriculture lands and land is to be made it as cultivable. 2. To make irrigation in tail end land in CADA area. However, groundwater studies support from lack of technical staff of for two to three years.

III. ENGINEERING ACTIVITIES

A. Field Irrigation Channels

Field irrigation channels means regulated water course or Hikkal having capacity not exceeding 1 cuff/sec (cusecs) or 30 Litres/Secs maintained by the land owner or by any other Agency on his behalf to receive supply of water from pipe outlet.

The CADA constructs the Field Channels and Field Drains and the farmers do the maintenance. It is the duty of farmers to maintain the Field Channels and Field Drains to get good water supply and remove excess water so as to maintain good quality of lands. In this regard, it is stated by the authorities of CADA that the quality of maintenance by farmers is very good. Because if the field channels and field drains are not maintained properly then the farmers will not get the water required for them. Secondly, if the drains are not maintained properly, then the excess water will not be drained out and the crop yield will be affected. Hence the farmers are very much interested in the maintenance of these works.[24]

[24]

Since the year 1979 to 1997, a total grant of Rs.436.97 Lakhs was provided under Central Sector Schemes to the Executive Engineers of Irrigation Department from out of Tungabhadra Project Command Area Development Authority funds towards construction of field channels for 26,130 hectares and to lining of field channels (both Right Bank side and Left Bank side). However, only 20,392 hectares were developed by spending Rs.370.57 Lakhs.[27] This suggests that there is a short fall of 5,738 hectares in physical target and also a short fall in utilising the amount to the extent of Rs.66.4 Lakhs.

The reasons for shortfall are many. One of the important reasons in the delayed construction of an aqueduct and other C.D. works across various nallas of D/No. 16/17 and 16A minors and P.O.S. of Right Bank High Level Canal by the Irrigation Department.[28]

B. Warabandi

Warabandi is a system of equitable distribution of water and minimisation of wastage. One of the major objectives of Warabandi System is to provide adequate, assured, timely and dependable water to all farm holdings, irrespective of their location in the command. Works under Warabandi include construction of dividing chambers, controlling structures, measuring devices, fixing of gates and name boards etc. The general awareness regarding the implementation of Warabandi among the farmers have been created and for this purpose water user societies are also formed. Under Warabandi scheme since 1977 to 1997 a

provision of Rs.337.23 Lakhs were made under the Central Sector Scheme for the achievement of physical target of 85,992 hectares. As against this Rs.269.23 Lakhs were spent and the physical target of 61,652 hectares have been achieved.[29] Here also, achievement falls short of target fixed.

In the Warabandi system of Irrigation the participation of farmers is of utmost importance. To achieve maximum utilisation of water made available in the Command Area and to maintain the distributories Field channel, central structures etc. in proper condition to enable the officers to supply water effectively the Government of India has given much importance. For the purpose of ensuring farmers participation since 1979 to 1997 an amount of Rs.24.67 lakhs was earmarked with a target of 1200 hectares having 122 farmers. As against this an amount of Rs.15.31 lakhs have been spent in an area of 7,866 hectares having 172 farmers.[30] During 1990-91 one Water Users Co-op. Society was organised at Dhandesugar (Taluka Sindhanur) covering an area of 798.94 Hectares. Till 31.3.1997 there are 15 Water Users Societies in the Command Area.[31] These Co-operative Societies came into existence due to the insistence of Government of India. The Government of India insisted that farmers participation should be involved in water management and micro level system of distribution is to be entrusted to the farmers for maintenance. Under this programme to involve farmers participation Water Users Co-op. Societies at various outlet levels are organised as per the directions of Government.

INDO DUTCH WATER MANAGEMENT - PROJECT[32]

To combat the problem of water logging and salinisation, it is necessary to study the behaviour of black cotton soils under irrigation conditions. Based on the data, it would be possible to devise, design methods for preventing and remedying water logging. Hence, a long felt need of the Command was fulfilled when a Pilot Project was established in the year 1985-86 with technical and financial collaboration of Netherlands (Dutch) Government in Distributory No. 36 of T.B.P. Left Bank Canal.

OBJECTIVES OF THE PROJECT

Pilot Project work in D-36 to Tungabhadra Left Bank Canal was started with Dutch Collaboration in 1986 with the objectives (1) increasing the water management efficiency and (2) for finding solutions to the problems of waterlogging and salinisation. An estimate for a total amount of Rs.230.00 lakhs was sanctioned for this purpose. The Dutch share is Rs.56.00 lakhs in this scheme. The Ist phase of this Pilot Project ended on 31st December, 1989 and the total cost incurred was Rs.102.00 lakhs.

The works of construction of measuring devices along the distributory 36 and its minors and selective lining in two reaches measuring 870 meters in the main distributory were completed during

the year 1990-91. The work of determining the seepage losses, calibration of pipe outlets and chak research in P.O. 8 L/S of 36-3 and 440 R/S of 36/1 have also been completed. The work done during the year 1990-91 has been mainly regarding taking the guage readings of the measuring devices, inflow measurements of up stream chaks, collection of data regarding the standing crops in the chaks and further chak research work in 8 L/S and 440 R/S. Proposals for starting the Phase-II for an estimated cost of Rs.432.054 lakhs were also submitted during the year 1990-91. This phase comprises of works like, installation of proportional modules, construction of measuring devices on sub-Distributories of D-36, constructions of controlling structures on D-36 selective lining. Major Nala Cleaning, Minor Nala Cleaning, Sub-Surface Field Drainage, Construction of Pickups on Minor Nalas for reuse of draining water, construction of measuring devices on major distributories of LBC, upgrading of service roads, ground water studies, remote sensing applications, study on tail end agriculture, training of Indian personnel etc. Out of the total amount of Rs.432.05 lakhs, the Indian contribution is Rs.70.648 lakhs and the balance amount of Rs.361.41 lakhs will be Dutch Share (i.e. Rs.154.739 lakhs which is reimbursable and the balance 206.663 lakhs which will be directly spent by the Dutch team). An evaluation mission to assess the results of the Pilot Project also visited the area and has submitted its report. The final

report consisting of recommendations and conclusions of Phase-I have been prepared and submitted to the Government.

The period from 1st January, 1990 to 31st December, 1990 is considered as transition phase and an estimate for Rs.13.00 lakhs has been submitted to Government for this purpose for taking up improvements in distributory 36, works like Minor Nala cleaning, repairs to Measuring devices, pipe drainage for treatment of waterlogged area under the Distributory 36.

During 1990-91 an expenditure of Rs.6,46,440/- has been incurred towards Monitoring Cell establishment charges, Petrol and Oil charges, construction of measuring devices, Major and Minor nala cleaning, selective lining and shorter term consultancies on Water Management.

The Phase-II of the Pilot Project is approved in June 1992 by the Government of Karnataka and the approval from Dutch Government is awaited.

The Government of Karnataka has also sanctioned Rs.70.64 lakhs for the Phase-II of the project. As per 1993-94 Annual Report (CADA) for this phase of the project a total of 13 posts were sanctioned, out of which 2 posts are of 'A' Grade and one 'B' Grade and the remaining 9 of 'C' Grades and one 'D' Grade.

CONSTRUCTION OF AYACUT ROADS[33]

The administrative control of the Ayacut Roads is under two Superintending Engineers viz. Superintending Engineer. T.P.C. Munirabad and Superintending Engineer, T.C.C.C. Yermarus. The Ayacut roads required for the use of Ryots for transportation of inputs to the fields and agricultural produce to the market. In the year 1986-87 under Indo-Dutch water management pilot project CADA has spent Rupees 6,70,000 for this purpose. The Netherlands Team expressed that the expenditure on formation of approach roads may not be a proper item of expenditure to be shared between the Netherland Government and Karnataka State. This suggests that amount is diverted from one scheme to the other. This is not a correct method of carrying out work. While utilising foreign aid, utmost care should be taken and money should be spent only for the purpose for which it is allocated.

Upto end of 1996-97 totally 1890.22 Kms. roads have been formed. However, a total of 3,100 Km. length of Ayacut road is required for entire T.B.P. CADA area.

HOUSING[34]

For this purpose since 1990-91 to 1996-97 Rs.91.25 lakhs were provided out of that a total amount of Rupees 86.72 lakhs were spent. Till 1996-97 under this scheme 79% progress is achieved.

IV. CO-OPERATION[35]

The amelioration of certain economic problems of Ayacutdars in the Command Area is possible only through Development of Co-operative Movement. Keeping this object in view, the Command Area Development Authority Act enshrines certain provisions for : (1) ensuring supplies of all inputs and services; (2) Development of Marketing processing and storage facilities and adequate communication system : (3) arranging for credit facilities to the farmers and the artisans; and (4) organising agricultural co-operatives and association for the benefit of ayacutdars residing in the Command Area.

Co-operative institutions in the Command Area have a major role to play in providing services and supplies to the agriculturists to enable them to get better yields from their lands and to augment their income. The co-operatives provide storage facilities, agricultural credit and other inputs to the farmers and also arrange for processing and marketing of the agricultural produce, through the Taluka marketing societies and regulated markets.

The Agriculture Credit is being dispensed by the District Central Co-operative banks as well as other Commercial Bank such as Tungabhadra Gramin bank. State Bank of Hyderabad, State Bank of Mysore, Syndicate Bank and State Bank of India. The long term credit

is advanced by the Primary Co-operative Land Development Banks in the Command Area. For this purpose since 1979 to 1997 under Central Sector Scheme an amount of Rs.41.49 Lakhs were provided for small and marginal farmers. However, only Rs.30.23 lakhs were utilised for this purpose.

The long term credit in the Command Area is made available through the Taluka Primary Co-operative Agriculture and Rural Development Bank functioning in the Command Area. There are 9 Taluka Primary Co-operative Agriculture and Rural Development Bank Ltd., functioning under Command Area. The long term advances for sinking of irrigation wells, taking up of grape cultivation, for development of coconut gardens and for land reclamation works etc., are advanced by these Banks.

For e.g. in the year 1981-82 advances of Agricultural Credit was extended through three sources. They are as under :

a) District Central Co-operative Banks - 343.87 Lakhs

b) Commercial Banks through Co-operative institutions - 375.68 lakhs.

c) Others - 617.08 lakhs. In other words a total of 1336.63 lakhs were advanced as short term crop loan. The details of credit

facilities made available under short term crop loan from inception of CADA till upto 1994-95 are as under :

1.	1981-82	1.336-63 Lakhs
2.	1982-83	1.412.71 Lakhs
3.	1983-84	1.687.69 Lakhs
4.	1984-85	1.407.45 Lakhs
5.	1985-86	2.460.57 Lakhs
6.	1986-87	2.597.98 Lakhs
7.	1987-88	2.097.92 Lakhs
8.	1988-89	1.795.41 Lakhs
9.	1989-90	2.629.71 Lakhs
10.	1990-91	960.20 Lakhs
11.	1991-92	1541.76 Lakhs
12.	1992-93	2684.00 Lakhs
13.	1993-94	2952.75 Lakhs
14.	1994-95	3248.30 Lakhs

Source : Annual Report - 1994-95 (CADA).

The total credit plan for the year 1990-91 was Rs.42.40 Crores as against the target sum of Rs.9.68 Crores is provided in the form of short term loan by the various banks in the Command Area. The progress of

advancement is poor due to non-recovery of loans from the borrowers. In the same way out of the total credit programme for the year 1993-94, Rs.6328.00 Lakhs of sum of Rs.2,952 Lakhs is provided in the form of short term loan by the various banks in the command area. The progress of advancement of S.T. loans is poor due to non-recovery of loans from the borrowers.[36]

The long term credit in the Command Area is made available through the Taluka Primary Co-operative Agriculture and Rural Development Bank functioning in the Command Area. There are 9 Taluka Primary Co-operative Agriculture and Rural Development Banks Ltd., functioning under Command Area. The long term advances for sinking of irrigation wells, taking up of grape cultivation, for development of coconut gardens and for land reclamation works etc. are advanced by these Banks.

Long term loans advanced by the Bankers from the inception of CADA to 1986-87 is as under:[37]

Sr.No.		
1.	1981-82	4.67 Lakhs
2.	1982-83	26.47 Lakhs
3.	1983-84	83.20 Lakhs
4.	1984-85	49.48 Lakhs
5.	1985-86	213.77 Lakhs
6.	1986-87	175.59 Lakhs

STORAGE AND MARKETING[38]

In the T.B.P. area, programme has been drawn up for providing adequate storage facilities to the ryots at village level. The godowns are constructed through the Co-operative Societies for which the funds are made available from the State Sector and Central Sector through the Co-op. Department. Even the NCDC has also advanced loans to the village societies for the development of storage facilities. In the past, it is felt due to escalation in the cost of construction, the village societies were not in a position to complete the construction of godowns. To supplement the funds, finance was made available to the societies for the completion of incomplete godowns from CADA. There were 50 such incomplete godowns in the achkat area in Bellary and Raichur Districts, when the CADA came into existence in the year 1980. The CADA has financed 42 co-operative societies to complete their incomplete godowns by extending financial assistance to an extent of Rs. 6.44 lakhs.

In the year 1980-81 there were only 210 storage Godowns with a capacity of 28500 M. Tonnes. However, in 1981-82 godowns increased to 263 with a total capacity of 33800 M.Tonnes in the Command Area.

It should be noted till 31.3.1990-91 there were 298 godowns with the total capacity of 36,600 M.Tonnes. These godowns are fully utilised

for storage of fertilisers, seeds and other agricultural inputs for supply of the same to the farmers and also storage of agricultural inputs for supply of the same to the farmers and also storage of agricultural products against which pledge loan facilities are extended.

There are 50 incomplete godowns in the Command Area of Bellary and Raichur Districts when CADA came into existence in the year 1980. These incomplete godowns could not be completed by the village co-operatives due to escalation in the cost of construction. Paucity of funds with a view to complete such incomplete godowns and to provide storage facilities to the farmers in the Command Area. The CADA provided additional funds required over and above the original estimated cost sanctioned by the NCDC etc. so far i.e. upto 1989-90 CADA has provided to extent Rs.10.09 Lakhs for completion of 58 such incomplete godowns.

Since 1994-95 to 1996-97 for the construction of 16 godowns a total of Rs.11.25 Lakhs were provided.[39]

PROCESSING UNITS [40]

There is one Co-operative Sugar Factory at Kampli, besides 3 other Sugar Factories are working under private sector and one more under public sector in the Command Area. Also, there are 5 Co-op. Rice Mills and 5 Cotton Ginning Units attached to the Taluka

Agricultural Produce Co-op. Marketing Societies in Raichur District. Similarly, 4 Co-op. Rice Mills and one Cotton Ginning unit are run by Taluka Agril. Produce Marketing Societies in Bellary District. These co-operatives help the farmers in getting their Agricultural Produce processed and also marketed through the regulated markets.

All the cotton gins run by the T.A.P.C.M.S. (except the T.A.P.C.M.S., Bellary) have worked to the full capacity during the past three years and earned profit. The ginning units are charging reasonable rates to the farmers for ginning, pressing etc., when compared to the rates charged by the private units. However, the rice mills run by the T.A.P.C.M.S. could not work to the capacity due to change in the mode of purchase of paddy.

With a view to increase the activities of the processing societies and to offer better services to the farmers, the CADA has provided funds to the T.A.P.C.M.S. Ltd., Raichur, Manvi, Sindhanur and Bellary during the year 1984-85 for carrying out repairs to the cotton gins of the societies. Also Financial assistance was also provided during 1982-83 and 1983-84 for installation of "Paraboil Units" by T.A.P.C.M.S. Ltd., Gangavathi, Kampli and Siruguppa to offer better price for paddy. All the units are functioning.

B. LINKING OF CREDIT WITH MARKETING [41]

A Novel Scheme was formulated for giving an incentive subsidy to the farmers who had borrowed loans from the Co-operative Institutions. The pattern of the scheme was to provide an incentive of 5% to the farmers, in the form of interest subsidy if they sell the agriculture produce through the Taluka Marketing Co-operative Societies, and Primary Agriculture Co-operative Societies and adjust the amounts towards their overdues. The loans under Short-Term, Medium Term and Long Term were covered. Keeping this in view an incentive at 2% was also thought of for the agency which procures the agriculture produce.

The Agriculture produce which is covered under the procurement and support price operations were excluded as it was the policy of State Government to encourage the procurement of foodgrains by such measures. Initially the farmers who are eligible for this 5% subsidy were only those who were belonging to the category of Small and Marginal Farmers, and later it was extended also to big farmers as small agriculturists had no sufficient surplus for repaying their dues.

A sizable amount of Rs.11.06 Lakh loans which were over due was recovered during 1981-82 and the amount of incentive subsidy

utilised is to the extent of Rs.1.11 Lakh and Rs.0.45 Lakh to the Farmers and Co-operative Institution respectively.

REGULATED MARKETS[42]

The importance of Regulated Markets is to ensure better prices to the Agricultural produce of the Farmers by eliminating the Middlemen, with these objects in view of the CADA was taken up the development of Regulated Markets in the Command Area. There are at present 8 Markets and 18 Sub-Markets in the Achkat Area. These Markets are developed from out of the grants provided by the World Bank assistance and also from the grants provided from CADA funds. Out of 8 Markets, 5 are in Raichur District and 3 in Bellary District. The Main Markets are developed after construction of shop-cum-platforms with World Bank assistance and also out of the financial assistance provided to them by the than Tungabhadra project as well as this CADA. The Trade has already shifted to these Market Yards and the Farmers are making full use of these markets. Regarding Sub-Market yards, the same are yet to be developed by the Marketing Department.

With a view to induce the traders to shift the trade to the market yards, the CADA has introduced a scheme under which grants to an extent of Rs.15.00 lakhs was provided to the Agricultural Produce Market Committee to assist the traders for construction of

shop-cum-platforms to create infrastructures and to shift the trade to the Market yards.

Apart from providing Finance under Central and State Sector schemes for forming Water Users Co-operative Societies, Credit facilities for crop loan and the construction of godowns, ayacut roads and housing, subsidy to small farmers at the rate of 25% and 33- 1/3 per cent was provided to marginal farmers, under Special Component Plan. Financial assistance was given for weaker sections under following schemes. They are as under :

STATE SECTORS SCHEMES

1) Farmers participation in water management.

2) Sanction of subsidy to small farmers.

3) Construction of Godowns and Business premises

Under Special Component Programme following schemes are implemented :[43]

1) Supply of Pneumatic type tyre carts to SC beneficialaries 60% subsidy.

2) Supply of Agricultural Implements free of cost to SC persons.

3) Sanction of Subsidy to SC farmers for sinking borewells laying pipelines and installation of pump sets.

4) Sanction of wooden and tyre carts to S.T. members (60% subsidy).

5) Sanction of Margin money to LICS or Water Users C.S. & 10% to 20% of estimated cost.

6) Supply of seeds, chemicals and fertilizers to SC person for free of cost for Rs.1600/- per head.

7) Enrollment of S.C. persons as members in Co-op. Societies

8) Supply of Agril. Implements to S.C. persons in Co-op. Societies free of cost.

9) Supply of Bullock and Bullock to S.C. persons of Co-op. Societies @ 60% of unit cost of Rs.8,800/-

10) Supply of Tyre-carts to S. C. persons of Co-op. Societies @ 60% of unit cost of Rs.12,300/- as the pieces where sugar factories are functioning.

11) Imparting training to S. C. Men and Women artisans (Tailoring, Amber Charka, Weaving)

12) Supply of machines and tools to trained S.C. persons @ 60% of cost

13) Providing Sewing machines to trained S.C. women

14) Construction of field irrigation channels under Lift Irrigation Scheme T.B.P. LNC to SC/ST farmers.

Till the end of March 1997 CADA has spent Rs.13.91 lakhs under Special Component Plan though the amount provided was Rs.22 lakhs.[44]

The schemes noted above were taken up by both Central and State Governments in Co-operation with each other. Apart from the works noted above, under State Sector exclusively the following services were taken up. They are : (1) Animal Husbandry and Veterinary Services, (2) Horticulture, (3) Afforestation, (4) Sericulture, (5) Fisheries.

However, it is the responsibility of the Government of Karnataka through its departments to operationalise these schemes.[45] The regular Agriculture Department of Government of Karnataka ensures supplies of all inputs and services. However, CADA will check up whether the supplies and services are made available or not. The supply of inputs include good quality seeds, fertilisers, pesticides and chemicals. The meetings are held at night so as to facilitate the farmers to attend their day time work in the fields. In these meetings, the details such as availability of seeds, fertilisers, chemicals etc. will be informed to

farmers. The State Agriculture Department will test the purity of seeds fertilisers, pesticides etc. The CADA will only supervise the work. If the stock is not available, it will be reported to the Assistant Directors of the Department who will in turn take action to make available the inputs.

To sum up, the activities performed through T.B.P. CADA were many and varied nature. In such a situation it is very difficult to ensure co-ordination in the organisation. Since the senior officers are deputationists, it is very difficult to expect to have co-operation among themselves and also with the Administrator of CADA. The practical difficulties encountered by Officers in their working throw light on the actual working of T.B.P. CADA.

On the basis of the data, obtained through, structured questionnaire and interviews, with the officers and non-official members of T.B.P. CADA the problems emerged in the working of T.B.P. CADA[4-6] can be grouped into three categories : (1) Official and non-official relationship (2) Administrative problems of CADA (3) Delegation of Administrative and financial powers.

(1) **Official and non-official problems**:

One of the members pointed out that there is no problem of co-operation from the officials. He particularly pointed out that the CADA

officials are giving co-operation in matters regarding irrigation development and canals. However, he is of 78 years of age and a new member. He is concentrating on the demands of farmers in the CADA meeting. Another non-official member pointed out that CADA officials are not giving co-operation regarding matters which pertain to various functions of the CADA. He stated that he do not get any information regarding how particular work is carried out. They show indifference to the members and work in their own way. He stated that there are problems in administrative and financial sphere. He also complained that due to absence of officers in the working hours it is a problem to the visitors and the beneficiaries to get the work done by the officials. According to this member CADA is able to complete about 50% of work load. To solve the problems he relies on the mechanism of requesting and reminding the officials to carry out the work.

(2) **Administrative problems of T.B.P. CADA :**

Administrative problems are very delicate and sensitive in nature. Hence, it is very essential for CADA to maintain cordial relations among the officers, who belong to different departments and deputed to CADA. In T.B.P. CADA, sometime Deputy Commissioners of Bellary or Raichur work as incharge administrators. Sometimes, Chief Engineer of Munirabad also work as Chief Administrator. The present Chief

Engineer who is working as Chief Administrator stated that there is cadre consciousness among officials. This is reflected in a subtle way. IAS Officers feel that it is embarrassing to attend the meetings of T.B.P. CADA convened by the Chief Engineer of Munirabad as he is not an officer of IAS cadre and the powers of IAS official is not fully vested in him. The Deputy Commissioner of Koppal, Raichur, Bellary and senior level officers did not attend any CADA meeting since last two years. They deliberately absent from attending the meetings. In addition to this, administrative wing CADA itself do not extend the co-operation if the Chief Administrator is not an IAS Officer. The present administrator is not getting co-operation from employees, who are not regular employees. They are indifferent to work and they are not trained also. This will create hurdles in implementing the decisions taken by T.B.P. CADA speedily.

The administrator is getting co-operation from the agricultural wing in implementing the programmes with regard to water logging and salinity. In the same way implementing Indo-Dutch programmes, the administrator is getting co-operation from co-operation wing. However, the Chief Administrator pointed out that due to insufficient and inexperienced staff he is not able to work efficiently. In the same way, temporary/ daily wages employees pose a problem, as they are not permanent, their morale is not up to the mark and it is very difficult to

exercise strict supervision and control over them. On the technical side, sufficient Junior and Assistant Engineers are not posted to CADA. It is very difficult to manage the work load. Moreover, due to lack of sufficient work, technical staff do not want to opt for CADA from the parent department. In the financial area, sufficient funds are not given by the Government every year at regular intervals. If the funds are not received in time it is very difficult to carry out the work. The administrator also felt that the powers conferred are not sufficient and he has to abide by the authority's decision and await Government orders for implementation.

While commenting on common defects in CADA, he stated that Chairman is not empowered to exercise the authority independently and he is bound by the decision of the CADA. Moreover, administrator also cannot act independently and take the decisions in allocating grants, depending on the demand. However, the rules of CADA do not allow though in July, 1981 T.B.P. CADA revised the powers delegated to the Administrator/ Asstt. Administrator as the powers delegated were found inadequate.

The Chief Administrator has also stated that the Department of Social Welfare has withdrawn all Special Component Programmes which were originally given to CADA. This suggests that slowly T.B.P.

CADA is stripped off from some of the functions and responsibilities. As a result, T.B.P. CADA is going to be reduced slowly to the status of a Government Department.

To improve the working, the Chief Administrator suggested that more powers both administrative and financial be given to him and CADA be allowed to act independently. For this purpose, sufficient staff and funds should be provided and wider sphere of activities in land and water management be entrusted to T.B.P. CADA. For this, political, legal and financial support should be given.

The Assistant Administrator also pointed out that for want of adequate training to the staff about administration and office working, administration is suffering. He opined that delegation of Administrative and Financial powers are not sufficient. He suggested that decentralisation of Administration powers under CCA Rules and KCSR rules be made. In the same way financial powers are limited upto the sanctioning of the status of group "B". This should be enhanced. To bring about administrative flexibility the CADA Rules and Acts must be amended.

From the discussion, it is clear that all is not well with CADA administration. The staff need to be trained in office management and

made conversant with rules and regulations so that difficulty in day-to-day administration be minimised.

All the three Land Development Officers i.e. Agriculture, Engineering and Co-operation pointed out that there is lack of adequate staff for extension works and funds for schemes. Except Land Development Officer (Agriculture) others do not find the need for more administrative and financial powers. Land Development Officer (Agriculture) also stated that there is no need for more financial powers but as Head of the Agriculture wing administrative powers regarding sanction of leave and increment should be vested with him.

All these Officers pointed out that they are getting co-operation from CADA authority in implementing schemes. But the Land Development Officer (Agriculture) stated that regarding the approval for schemes, like land reclamation and adoptive trials, the Central Government's approval is necessary which causes lot of delay in implementation. He suggested that these powers should be given to the Administrator for the sake of smooth implementation of works. He also suggested that vacancies of field staff be filled up. His suggestion that the staff working in CADA Head Office be transferred from one place to another or from CADA to CADA within the State deserves merit as by this method day to day administration in CADA becomes dynamic.

Though the Annual Report of TBP CADA for the year 1986-87 mention that there is complete coordination between the Departmental offical's working in TBP CADA, theory and Practice may differ. In fact, when questioned about the mode of functioning, senior level officers pointed out that the exiting departments are functioning parallely and TBP CADA has become inactive and is a fifth wheel in the coach.[47] This suggests that in actual working team spirit is lacking in TBP CADA.

NOTES AND REFERENCES

1. Administrator, Tungabhadra Project Command Area Development Authority, Munirabad, Annual Report for the year 1981-82, P.4.

2. Information obtained from the Office Superintendent of Administration Section, T.B.P. CADA on 10.3.1999.

3. Ibid.

4. T.B.P.-CADA, Annual Report for the year 1981-82, Op.cit., pp.8-9.

5. Physical and Financial target fixed and achieved since 1979-80 till 1996-97 (March 1997), P.7. T.B.P. CADA (Mimeo.).

6. T.B.P. CADA Annual Report for the year 1986-87 (Administrator T.B.P.-CADA, Government of Karnataka), P. 18.

7. T.B.P.-CADA Annual Report for the year 1990-91, (Administrator T.B.P.-CADA, Government of Karnataka), P.14.

8. T.B.P.-CADA Annual Report for the year 1992-93 (Administrator T.B.P.-CADA, Government of Karnataka), P.28.

9. T.B.P.-CADA Annual Report for the year 1996-97 (Administrator T.B.P.-CADA, Government of Karnataka), P.25.

10. T.B.P.-CADA Annual Report for the year 1986-87 (Administrator T.B.P.-CADA, Government of Karnataka), P.51,52,53.

11. Physical and Financial target fixed and achieved since 1979-80 to 1996-97.

12. T.B.P.-CADA Annual Report for the year 1986-87, Op.cit., P.51.

13. Ibid., P.29.

14. Physical and financial target fixed and achieved since 1979-80 till 1996-97, T.B.P.-CADA (Mimeo.), P.7.

15. T.B.P.-CADA Annual Report for the year 1981-82, Op.Cit., P.15.

16. Physical and Financial target fixed and achieved since 1979-80 till 1996-97, T.B.P.-CADA (Mimeo.).

17. Information supplied by Land Development Officer, T.B.P. CADA on 10-3-1999.

18. T.B.P.-CADA Annual Report for the year 1996-97, Op.Cit., P.25.

19. T.B.P.-CADA Annual Report for the year 1981-82, Op.Cit., pp.17-18, Annual Report for the year 1986-87, Op.Cit., pp.24-28.

20. Physical and Financial target fixed and achieved - T.B.P. CADA (Mimeo.) since 1979-80 till 1996-97, P.7.

21. T.B.P.-CADA Annual Report for the year 1981-82, Op.Cit., P.3.

22. Ibid., P.17, Annual Report for the year 1986-87, Op.Cit., pp.25-27.

23. T.B.P.-CADA Annual Report for the year 1990-91, Op.Cit., pp.20-22.

24. T.B.P.-CADA Annual Report for the year 1992-93, P.34.

25. Ibid., P.55.

26. Excerpts from the Notes of Interview, L.D.O. 12-3-1999.

27. Physical and Financial target fixed and achieved T.B.P.- CADA (Mimeo.) since 1979-80 to 1996-97, P.7.

28. T.B.P.-CADA Annual Report for the year 1990-91, Op.Cit., P.26.

29. Physical and Financial target fixed and achieved- T.B.P. CADA (Mimeo.) since 1979-80 till 1996-97, P.7.

30. Ibid.

31. T.B.P.-CADA Annual Report for the year 1996-97, Op.Cit., P.26.

32. T.B.P.-CADA Annual Report for the year 1986-87, Op.Cit., P.36 and also see, Annual Report 1990-91, P.29, and Annual Report, 1991-92, pp.34-35, and Annual Report for the year 1993-94, Op.Cit., P.22.

33. T.B.P.-CADA Annual Report for the year 1981-82, P.21, and see, Annual Report for the year 1986-87, Op.Cit., P.19,36.

34. Physical and Financial target fixed and achieved for six years - 1990-91 to 1996-97 (Mimeo.).

35. Physical and Financial target fixed and achieved since 1979-80 till 1996-97 (March, 1997), P.8, T.B.P.- CADA (Mimeo.)

36. T.B.P.-CADA Annual Report for the year 1993-94, Op.Cit., P.44.

37. T.B.P.-CADA Annual Report for the year 1986-87, Op.Cit., P.45.

38. T.B.P.-CADA Annual Report for the year 1981-82, Op.Cit., P.32 and see, T.B.P.-CADA Annual Report for the year 1986-87, Op.Cit., P.22.

39. T.B.P.-CADA Annual Report for the year 1996-97, pp.27-28.

40. T.B.P.-CADA Annual Report of the year 1986-87, pp.22-23.

41. T.B.P.-CADA Annual Report of the year 1981-82, P.34.

42. T.B.P.-CADA Annual Report of the year 1991-92, pp.32,33, and see Annual Report 1992-93, P.40.

43. T.B.P. CADA Annual Report of the year 1993-94, P.48, and see also Annual Report 1996-97, pp.25-29.

44. Physical and Financial target fixed and achieved since 1979-80 to 1996-97.

45. Excerpts from the Notes of Interview Land Development Officer Co-operation T.B.P. CADA on 11-3-1999.

46. Excerpts from the Notes of Interview and also the information provided in the questionnaire by the officers of T.B.P. CADA 10-3-1999.

47. Excerpts from the Notes of Interview of Senior Officers of T.B.P. CADA 10-3-1999.