# Unique land Development process of Educational town, VallabhVidyanagar

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Abstract—The city is the most powerful factor in the development of human civilization. It is a dynamic counterpart to the conservative and static village. It can render a positive service to society, in spite of the evils and difficulty of the city life. It generates economic activities and growth potential even though economic development does not keep pace with urban development. Everywhere the urban population is growing and continues to mount because they are the beehives of development activities providing jobs to millions. Through this paper, one can get a different perspective of planning a rural area and development story of creating a "gold out of dust." i.e conversion of rural land into well planned and developed educational hub. The technique of development can be termed as Land pooling and readjustment scheme.

This paper attempts to share a unique story of land development process which converted the rural land of three villages into a fully functional and developed, well planned city named as VallabhVidyanagar ("vidya" means knowledge and "nagar" means town in local language), over a span of 50 years of its establishment. This paper is not meant for critical appraisal of the present status of the city but to share the story of development process in its initial phase.Land is a natural resource, which cannot be produced by human endeavor, it is unique reason because its location is fixed and therefore limited in supply at particular place. The supply of land is fixed quantitatively but its use value can be increased with intensive use. The lasting quality of land brings it in the category of commodity, which can be stored, exchanged and used as a factor of production.

Index Terms—Educational town ,Rural land conversion, Readjustment Scheme,Land Development, Land Pooling, VallabhVidyanagar

## 1 Introduction:

# THE ESTABLISHMENT OF VALLABHVIDYANAGAR

The establishment of VallabhVidyanagar in Kheda District of Gujarat state of India is a unique example of Land pooling and readjustment of rural area. VallabhVidyanagar owes its very existence, and the success of its achievements, goes to the genius of one person, Bhaikaka, who conceptualized, planned and executed the university town. The story of development of such town is briefly stated as follows

The two main reasons for the establishment of VallabhVidyanagar were:

# 1. The need for a centre for higher education:

Prior to independence, the nearest centres of engineering studies for the students of Gujarat were the Poona Engineering College and the Engineering College at Karachi.

Although the Poona Engineering College was at a reasonably close distance for students from Gujarat, admission was difficult to obtain, and generally denied under various pretexts.

The Engineering college at Karachi, that was established in 1923, was the centre of technical education that served the needs of the students from Gujarat.

In 1936, Sind was separated from Bombay province, and the Sind government passed a resolution that gave preferred admission to local students. This, in effect, closed the doors of Karachi Engineering College to the students of Gujarat.

In 1935, Kasturbhai Lalbhai began negotiations with the Government of India to start an Engineering College at Ahmedabad for which purpose he had set aside Rupees twenty lakhs, a very handsome sum in those days. However, there was no immediate finite outcome.

Against this background, in order to fill the gap, Bhaikaka perceived the idea of starting a centre for higher education, of which an Engineering College would be an integral part.

# 2. To revitalize and develop the rural areas:

Higher education was available only in urban areas. Talented students from rural areas who got their education in urban areas, ultimately settled down in the urban area itself. In order to prevent this brain-drain from the rural areas, it was essential to create centres of learning in the rural areas itself, that were in tune with what was required to promote and sustain village industries.

## 2 THE VISION

In August 1942, the last and crucial phase of the freedom struggle, the Quit India movement, was launched. Gandhi, Sardar and thousands of other leaders and freedom fighters were imprisoned.

Bhailkaka resigned from his job to join Mahatma Gandhi's movement, settling down in his native village. He began to think of what he could do to fulfill the Sardar's dream to bring development to the villages.

Bhaikaka wanted to do something that would involve the enlightened self-interest of the villagers and reduce the rural-urban divide. He spent the next one and a half years thinking and planning the direction to take towards this end

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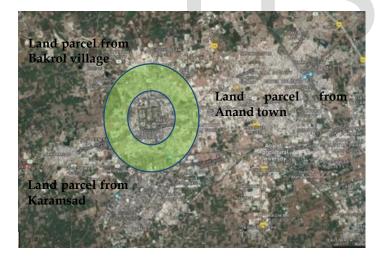
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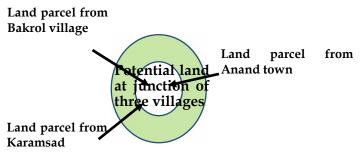
## 3 THE FORMULATION OF AN IDEA

Bhaikaka reflected over a plan that would end the intellectual and economic exploitation of the villages. He came up with the idea of establishing a centre of education in the rural areas. Besides providing vocational education for small-scale industries, home industries and crafts by way of providing training in workshops and foundries, he thought that there should also be facilities for turning out graduates and postgraduates in different disciplines. He thought of laboratories for chemistry and facilities for physical explorations besides colleges for science and engineering. A commerce college to impart education about trade and economic affairs and colleges to teach the fine arts. Physical culture training centres to impart education about the use of arms, medical colleges, etc. were all to form a part of the complex.

Such institutions were found only in urban areas. The main beneficiaries of this new educational centre would be the people living in the rural areas, although the people of urban areas could also avail of the facilities with ease and a minimum of expenditure.

Government jobs and similar other opportunities were generally cornered by the urban people. These jobs were in positions that carried power such as the power to utilize government funds that were collected from all over the country. These funds were used for the welfare of the urban areas because the people sanctioning them were from an urban background. Starting an education centre in the rural areas would be the proper way to break the vicious cycle of exploitation of the rural areas.





## 4 THE SEARCH FOR LAND

In the beginning, before the actual start of the project, it was thought appropriate to look for land in Anand, where institutions for primary and secondary education already existed. Therefore, only the requirements of higher education would have to be thought of and fulfilled. However, preliminary investigations showed the idea as not workable. In March 1945, the scouting for land in a radius of 5 miles around Anand began. It had been decided that the education centre would be set up in the village that was willing to donate the required land.

In the initial stages, lands at the junction of villages Napad, Naval and Vadod seemed to be ideal and the landowners were also willing to donate their land.

However, the extent of land was not sufficient to fulfill the requirements of a growing educational town as Bhaikaka had envisaged. Subsequently, land at Mogar village was made available. Finally land, which was at the junction of three villages, namely, Anand, Karamsad and Bakrol, was selected. This location was considered ideal, as the railway station at Anand was only 3 miles away. Besides, it was also close to the road that linked Anand with Nadiad (the two main cities connecting the major route of Ahmedabad and Bombay). The village Bakrol donated the majority of the land as their land was not very fertile and would not support agriculture and therefore, could be spared. Next, Anand came forward to donate some land. The villagers of Karamsad had refused to donate land all along. This was primarily because all the holdings were rich, agricultural land. Bhaikaka explained to them that while being the village to which SardarVallabhbhai Patel belonged, after whom the educational town was to be named, it would not reflect well on them if they did not donate any land. He also explained to them the advantages of receiving a regular sized plot, having access to all the amenities, in exchange for their irregular sized fields without any infrastructure. This convinced them, and they too finally donated some land. In this way a total of 800 bighas (128.44 hectares or 1297075.60 sq.mt. or 320.41acers ) of land was received.

#### 5 THE CONCEPT OF LAND POOLING

As the country was still ruled by the British, Bhaikaka was aware that no co-operation would be forthcoming neither from the Government nor from the wealthy to support such a plan. A new town cannot be created without any money. Therefore, the plan had to be self-financing.

At this juncture, the knowledge that Bhaikaka had collected through his experience of working in the Ahmedabad Municipality came in useful. He thought of the concept of land pooling. He knew that when rural land is transformed into urban land through planning and the provision of urban infrastructure facilities, it appreciates many times in value. The appreciation is so much that even after deducting the original value of the land used, plus the cost of roads and other physical and social infrastructure, the new value of the remaining land is several times more than the total value of the original land. In this way it could be possible to realize the entire plan through the enlightened self-interest of the general population who had donated land for VallabhVidyanagar.

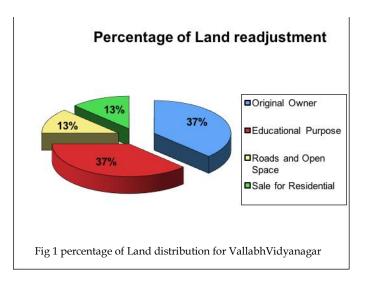
# 6 The Plan of VallabhVidyanagar

After the finalization of 800 bighas (128.44 hectares) of land, the detailed planning based on the conceptual ideas was started. As shown in Fig 1, 37.5% of the land was to be used for educational institutions, staff quarters, hostels and the future University. Another 37.5% of the land was to be returned to the donors in the form of regular developed plots with infrastructure services.12.5% was to be used for roads and green open spaces. The remaining land, in the form of regularized plots, was to be sold to others interested in settling down in the town.

The plots were to be sold at Rs 3.50 per square yard. Of this, Rs 2.50 was the original cost of the land and Rs 1.00 was towards the provision of infrastructure facilities. The same rate was applied for distributing land to the original owners as well, who were given back one third of their original plot sizes. The logistics was that change in use adds value to land. Thus, agricultural land converted to urban land was going to appreciate to 100 times its original value in the foreseeable future. The enterprising people who had donated their land were able to realize this, which is why they agreed not only to settle for one third of their original land, but also to pay the development charges of Rs 1.00 per square vard. In this way Bhaikaka was able to raise the necessary capital to start the project. The detailed plan was prepared by the Ahmedabad based firm of Amin-Desai, based on the original ideas of Bhaikaka, which he would conceptualize on the site itself, sitting under his famous Banyan tree.

An interesting fact in the distribution of land, was that while returning the land to the original owners, Bhaikaka ensured that donors were given plots located closest to their original villages. He realized the kind of bond Indians have for their village and for their families, which he did not want to sever.

The plan of VallabhVidyanagar as shown in Fig.2 consists of a central oval of about 300 bighas, which houses all the institutions, staff quarters, hostels and the University. The peripheral area is divided into plots of two regular sizes, one of 500 square yards (418.06 sq.mt.) and the other of 1000 square yards (836.15 Sq. mt.), which are located on the main roads. A 60 feet (18 mt.) wide road encircles the oval. The roads in the residential areas are 30 feet wide(9 mt.). In the centre of the oval is a rectangular playground. That playground is known as Shastri-Maidan today. The playground is used for sports activities, educational fairs, and for large community gatherings. The whole town model was based on three basic zoning i.e central open space(playground) surrounded by Institutional zone and residential zone as shown in fig 3.



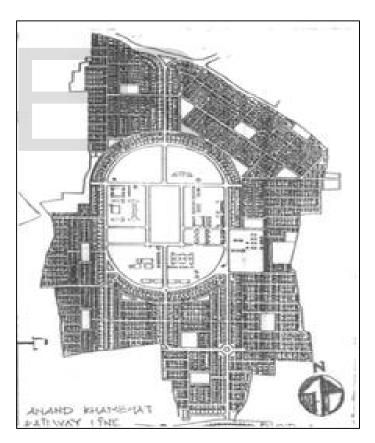


Fig.2 Plan of VallabhVidyanagar



### 7 Phase wise growth

The town was laid out in 1945. Starting from a shoestring budget and with a zero sum policy, together with the good will and cooperation of the people, Bhaikaka converted the entire central playground into a bustling manufacturing yard. All the materials that were required in the construction of the buildings began to be produced locally in the yard. This not only generated employment for the people but also meant that local skills were upgraded. This furthered the support of the people for the project. Moreover, it resulted in a saving of almost 40% in terms of material cost and transportation. Construction of all the building materials such as bricks and lime and components such as doors and windows, fixtures and pipes were produced. The construction of the first educational institution, the Vithalbhai Patel Mahavidyalaya started in 1946, and reached a functional status by 1947.

Soon after Independence, the rebuilding of the nation began. For this, there was an immediate need for engineers Bhaikaka too realized that without technical advances percolating down to rural areas, the compressive upliftment and advancement of the villages would also remain a distant dream. On the persuasion of SardarVallabhbhai Patel, the noted industrialist Ghanshamdas Birla instructed the Birla Education Trust to donate Rs 25 lakhs for establishing an engineering college in VallabhVidyanagar. The college started functioning in 1948. The Commerce College followed in 1950.

Simultaneously, the CharutarGramodharSahkari Mandal (CGSM) took over the responsibility of providing the essential services such as water and electricity in the town. The important roads were brick-paved and a bus service started between the new township and Anand.

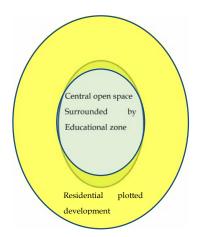


Fig 3 Conceptual zoning diagram and satellite image of the vallabh vidyanagar town in 2017

#### 8 THE MACROSCOPIC AREA

The establishment of VallabhVidyanagar has transformed the entire dynamics of the area.

The Kaira District Co-operative Milk Producers' Union Ltd. was founded in Anand in 1946 and the subsequent success of the Amul story is known to all. Amul demonstrated that farmers' co-operatives could employ professionals, make use of technology, and harness market forces to serve their ends without disturbing the agro-system.

In order to replicate the example of Amul all over the country, the National Dairy Development Board was set up in 1965. In the late sixties, the Board drew up a project called Operation Flood, which sought to link dairy development with milk marketing. In the past 50 years, the co-operative movement NDDB helped to create has become a model for other developing countries and international agencies that are concerned with dairy development.

Since then NDDB has taken on projects on Oilseeds Growers' cooperative, Fruit and Vegetable Project, and the Sabarmati Salt Farmers' Society. In 1988 the Board underwent a structural change, and formed a Company by the same name under the Companies Act 1956.

Both these establishments have played an important part in the economic upliftment of the rural population. The institutes of VallabhVidyanagar serve the purpose of providing the human resources that are so essential to the continuation of functioning and spread of activities of these two bodies.

The establishment of VithalUdyognagar brought another spurt of frenzied activity and provided gainful employment to both the graduates as well as the rural population as administrators, technicians and industrial workers.

Thus, Vidyanagar became the nucleus of the larger macroscopic area.





Fig 4, Plan as envisaged and google image of the town

## 9 THE URBAN ECOSYSTEM

Bhaikaka had envisaged VallabhVidyanagar as a Green Town. Before the educational centre was established, the area was basically wasteland, with eroded ravines and a cover of scrubby bush with a few indigenous species occurring sparsely.

Bhaikaka began planting on either side of the main roads even before the construction started. Initially the avenue trees were planted which have grown to maturity and offer plenty of shade around ShastriMaidan, the Oval and the roads leading to Vadtal and Karamsad. This was followed with planting around the institutions. In the second phase, colouring flowering trees, ornamental species, evergreens, and other rare species were planted. On the whole, 80 different species of trees are found today.

The Bhaikaka Foundation was established to take care of the existing trees and to plant new ones every year. However, with the planting of fast growing foreign and hybrid trees, the indigenous varieties are being edged out. It is therefore, required that the indigenous species be reintroduced to preserve the bio-diversity of the area.

#### 10 Conclusion

VallabhVidyanagar has worked as a catalyst to invite others into the area. The establishment of VallabhVidyanagar was also instrumental in upgrading the economic profile of the rural areas. The shift in the generation of primary employment from agricultural to institutional had a multiplier effect, creating opportunities for secondary and tertiary employment for the people. In any developing country, things do not happen by the Government or through Government intervention. It is the people's effort that is required, and Bhaikaka gave this idea of people's participation form, through the establishment of VallabhVidyanagar.

Bhaikaka was successful in collectivizing both the people and their land. The reason was that he had the faith of the people. His integrity gave people the confidence that Bhaikaka would not only return their land to him, but would do so with the promised infrastructure.

His honesty, character, and knowledge of Town Planning was instrumental in paying back to the people much, much more than they had expected or ever envisaged.

The educational programme, which began in 1947 with strength of 573 students, in 2017 had strength of approximately 30,000 students and one can say that the vision and intention with which the educational town was established is truly a remarkable and unique development of VallabhVidyanagar.

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