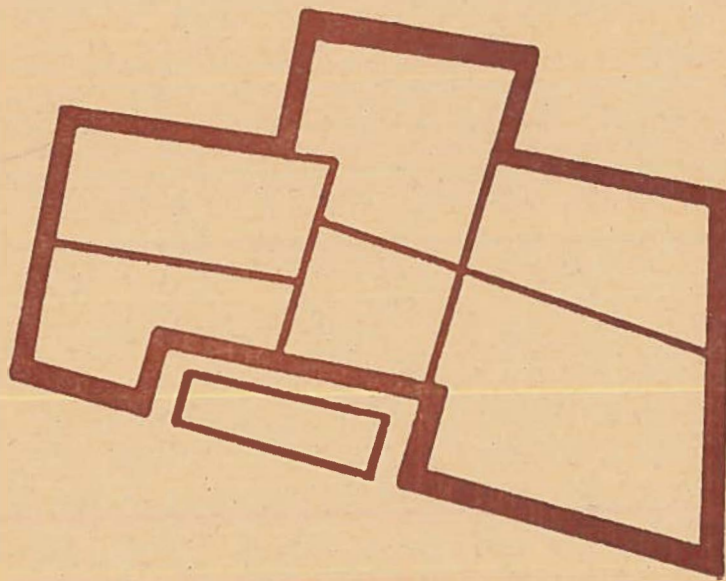


**BAYAD
HUMAN DEVELOPMENT
PROJECT**



**CONSULTATION
SUMMARY STATEMENT**

BAYAD HUMAN DEVELOPMENT PROJECT

CONSULTATION SUMMARY STATEMENT

Prolegomena

- I. The Operating Vision
- II. The Underlying Contradictions
- III. The Practical Proposals
- IV. The Tactical Systems
- V. The Actuating Programs

Epilogue

The Institute of Cultural Affairs
organized by
October 8 - 14, 1975
Arab Republic of Egypt
Bayad Al Arab, Beni Suef
which took place in
Bayad Human Development Consultation
This is a publication of the

DAYAD HUMAN DEVELOPMENT PROJECT

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Table of Contents

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CONTENTS

| | |
|--|-----|
| Prolegomena | 1 |
| <u>Part One: The Operating Vision</u> | 11 |
| Plate 1: Operating Vision Chart | 15 |
| <u>Part Two: The Underlying Contradictions</u> | 17 |
| Plate 2: Underlying Contradictions Chart | 19 |
| <u>Part Three: The Practical Proposals</u> | 29 |
| Plate 3: Practical Proposals Chart | 31 |
| Plate 3A: Practical Training Proposal | 39 |
| Plate 3B: Village Extension Proposal | 40 |
| Plate 3C: Environmental Facilities Proposal | 41 |
| Plate 3D: Community Housing Proposal | 42 |
| Plate 3E: Expanded Production Proposal | 43 |
| Plate 3F: Industrial Development Proposal | 44 |
| Plate 3G: Local Commerce Proposal | 45 |
| Plate 3H: Social Engagement Proposal | 46 |
| Plate 3I: Village Cooperation Proposal | 47 |
| <u>Part Four: The Tactical Systems</u> | 49 |
| Plate 4: Tactical Systems Chart | 53 |
| Plate 4A: Economic Base | 73 |
| Plate 4B: Social Forms | 74 |
| Plate 4C: Village Structures | 75 |
| Plate 4D: Learning Tools | 76 |
| Plate 4E: Project Relations | 77 |
| <u>Part Five: The Actuating Programs</u> | 79 |
| Plate 5: Actuating Programs Chart | 81 |
| Plate 5a: Actuating Programs Components | 83 |
| Program 1: Complete Health Clinic | 84 |
| Program 2: Unified Nutrition Service | 86 |
| Program 3: Total Functional Education | 88 |
| Program 4: Informal Schooling Institute | 90 |
| Program 5: Womens Activity Society | 92 |
| Program 6: Young Citizens Corps | 94 |
| Program 7: Early Learning Center | 96 |
| Program 8: Bayad Renovation Project | 98 |
| Program 9: Bayad Development Corporation | 100 |
| Program 10: Bayad Village Plaza | 102 |
| Program 11: Domestic Water System | 104 |
| Program 12: Desert Reclamation Enterprise | 106 |
| Program 13: Essential Services Network | 108 |
| Program 14: Building Materials Company | 110 |
| Program 15: Small Industry Development | 112 |
| Program 16: Intensive Agricultural Production | 114 |
| Program 17: Livestock Raising Combine | 116 |
| Epilogue | 118 |
| Plate 6A: Budget Summary Chart | 131 |
| Plate 6B: Projected Costs Over Four Years | 132 |
| Plate 6C: Project Funding Flow Chart | 133 |

PROLEGOMENA

I

THE LOCATION

The Bayad Human Development Consultation is the initial step of a comprehensive community development demonstration project by the people of Bayad Al Arab. One hundred twenty kilometers south of Cairo, Egypt, the village of Bayad is situated on a low limestone shelf at the end of the paved road from Helwan. It clings to a thin, green strip of arable land on the poorer eastern bank of the Nile, across the river from the city of Beni Suef. The Bayad Human Development Project is a comprehensive effort involving both the social and economic development of the community. It was conceived in collaboration with Egyptian government officials, religious leaders and a group of local citizens of the village who provided the substance of the project design and who are ready to act upon it. Their intentions are to provide practical training by expanding functional education; to enable the physical development of the village and the villagers through basic services now lacking; to ensure economic expansion through land use, commerce and industry in order to move beyond a subsistence economy; and to encourage the social well-being of the community through the significant engagement of all the people in the rebuilding process. This Project is seen as a demonstration of methods which can be used by any village in the nation and which, therefore, can be replicated elsewhere.

Egypt is known across the globe as the cradle of civilization. Her early accomplishments in science, agriculture, mathematics and language provided the foundations for modern communications and technology. Her monumental architectural efforts rank as wonders of the world. The flowering of her people's creative spirit during the Pharaonic Age enriched human culture for centuries with classic examples of poetic expression and quality craftsmanship. Today, as the nation's 29,000 rural villages and hamlets struggle daily with grinding poverty and its cities experience accelerating urban migration, Egypt stands at the threshold of a new phase in its history. In 1952 the initiation of a land distribution system gave millions of people their first chance to own land. This groundswell of renewal gained further momentum in 1971 when the Ministry

of Local Government launched the Organization for the Reconstruction and Development of the Egyptian Village (ORDEV). Just six years later during the week preceding the Consult, the entire nation marked the end of a period of steadfastness and recognized the beginning of a new era called "upsurge". Such a bold declaration not only provides a creative context for all forthcoming rural development efforts, but also is a particularly appropriate link between the Egyptian people's long ability to build lasting monuments and their present commitment to shape significant social and economic patterns for the future. In a very real sense it could be said that the nation has already laid the cornerstone of a new human construct which will, in its influence upon the consciousness of the globe, be comparable to that of the pyramids and the sphinx. Though the people endure with patient resignation, they experience an increasing urgency for technological and social development in the rural areas. The bright lights of town and city focus attention upon this time of change. It is at this point that the Bayad Human Development Project can be of signal value as a pilot effort.

BENI SUEF

The city of Beni Suef is situated 120 kilometers south of Cairo on the Cairo-to-Aswan highway. It is a city of proud people, many of whom are direct descendants of the ancient Egyptians. Beni Suef is the capitol of the farming province that bears its name. By her very history and location, the city serves as a conduit, linking Upper and Lower Egypt. The Province has a demonstration poultry farm that is the largest and most modern in the Middle East. It is also the site of Maidoum, one of Egypt's first pyramids built 4,500 years ago. Maidoum stands as a sign of both the ancient and vibrant nature of the people. But the city's great past has been eclipsed recently by the realities of contemporary socio-economic challenges. Despite her pre-eminence in the nation's history, the Province of Beni Suef is presently last in per capita income. While the rich and varied produce from the farms and groves of the Nile Valley to the south and north pour into the city in large amounts, the people rarely have a substantial share in the abundant array of produce. The goods are bound for Cairo in the North and Aswan in the south. The rail system and Nile River traffic that pass through and by the city, linking the two great areas of Egypt, have been instrumental in enriching the Republic's economy, but not that of Beni Suef itself. Indeed, textile manufacturing is the city's only sizable industry. The image that Beni Suef reflects today is the vision of past glories. But the city and her people have been caught up in and are ready for the new national "upsurge" campaign.

The village of Bayad, meaning "the whiteness", is located on the east bank of the Nile River. It is one of eight hamlets with a population of more than 10,000. The villagers are descendants of the fellahin (plowmen) who have lived on these very lands along the Nile for the 5,000 years of Egyptian history. The village is

accessible by paved road from Cairo through Helwan, or by crossing the Nile in a ferry or felouka from the city of Beni Suef. The major commercial area is located on the west bank of the River in Beni Suef, as minimal commercial activity takes place in Bayad and its neighboring villages. The Nile is still the major means of transporting goods to and from Beni Suef's markets. At any moment one can see a string of sailboats, each plying its course between the east and west banks. Village water for all purposes is obtained from a narrow canal leading from the River along the boundary of the village. Three fertile and largely uncultivated islands representing a total of 750 feddans lie between the west and east banks of the River. A limestone quarry lies to the east of the village and clay deposits suitable for brick making are available. The livelihood of the village depends on a narrow strip of arable land. Maize, cotton, vegetables and citrus fruits are the staple crops. Turkeys, chickens and goats are raised and kept within the house complex. The houses are lit by kerosene lamps and have ventilation holes near the ceiling. Education is available through the primary school level, but work requirements in the fields preclude further education for most students.

BAYAD

An ancient farming community that dates back to the days of the Pharaohs, Bayad stands between the great Eastern Desert and a strip of arable land barely a kilometer wide. The villagers still use the agricultural tools and methods of their ancestors, though new a pumping station lifts the Nile water into a long canal for irrigating farmed land. Women, draped in black, walk erectly along dusty paths from the canal to the village, a distance of one-half kilometer, with water jugs balanced gracefully on their heads. From the same canal that quenches Bayad's thirst comes the water that provides a cooling place for people and animals to bathe. Men struggle behind one-share plows pulled by water buffalo. At noonday, the farmers seek shelter from the intense sun in huts constructed of cornstalks. The primary school's six classrooms are crowded with twice the number of children as desks and chairs. The village's eight small stores carry an inventory of eight or fewer items: oil for kerosene lamps, cigarettes, matches, tea, sugar, sesame seeds and beans. Half a kilometer south of Bayad Al Arab is a small limestone quarry, a sun-baked pit that provide employment for several heads of families and a handful of apprentices. In the late evening, men return to their homes which are fashioned from hand-crafted rock insulated with a clay coating. The thin irrigated strip of cultivated land comprises 1800 feddans and is bounded by the Nile on the west with the desert to the east. The 337 households are divided into 11 clans which have their own care structure, and are represented on the Village Council by three men.

BASELINE

II

THE CONSULTATION

AGENT

The Institute of Cultural Affairs is an intra-global research, training and demonstration group concerned with the human factor in world development. It is registered as the Institute of Cultural Affairs, a non-governmental, non-profit international rural development agency in the Governorate of Beni Suef, the Arab Republic of Egypt. The Institute has headquarters in Brussels, Bombay, Chicago, Canberra, Hong Kong and Nairobi. In addition, there are ICA offices in more than 100 major cities serving 24 nations. The Institute's programs around the world are supported by grants, gifts, and contributions from governmental departments and agencies on national, state and municipal levels, and from private foundations, corporations, trusts, and concerned individuals.

ORIGIN

Recently, the Institute of Cultural Affairs has been working in the Middle East with people concerned with the reformulation of community life at the local level. In 1971, a group of Coptic Orthodox Church officials from Egypt attended the International Training Institute in Addis Ababa, and then, in 1975 visited the Kawangware Human Development Project, Kenya. Subsequently, local representatives from Beni Suef invited the Institute of Cultural Affairs to consider a similar project in Egypt. Inquiries were made in order to locate a site in which to demonstrate the effectiveness of a comprehensive approach to community development, and Bayad was visited and chosen. The village is representative of the poverty found in Egypt particularly on the east bank of the Nile. Its position on the edge of the desert emphasizes its role as a demonstration of future possibility for Egypt. The Governor of Beni Suef expressed his delight at this invitation and has continued to support the project's initiation in many very substantial ways. Encouraged by this response and at the suggestion of the Bishop of Beni Suef and the Bishop of Ecumenical and Social Affairs, further meetings were arranged with the Governor, the Ministry of Local Government, and the Ministry of Social Affairs. Contact was made with the Dean of the College of Arts and Human Sciences, Minya, together with two Coptic Bishops and an eminent Egyptian sociologist at the American University in Cairo who willingly agreed to serve on a selection board with Institute of Cultural Affairs staff to recommend and encourage Egyptians to spend a year working in the Bayad demonstration. From a list of applicants, eight were invited to participate. Another key part of the initiation was government approval and support for the

project, obtained in full through the Ministry of Local Government and granted on October 6, 1976.

The Consult took place in Bayad from October 8-14. There were 191 consultants, of whom one half were residents of the project area. It is estimated that 1200 additional residents were indirectly involved in the Consult through field work contacts. In addition to the time spent in discussion and writing sessions, each of the five consult teams spent two to three hours per day visiting and talking with local people in their homes and places of work. Of the 97 non-resident consultants, half came from sites in Egypt, including Minya, Beni Suef and Cairo. The remainder of the consultants came from nine other nations including Belgium, England, Holland, India, Kenya, Malaysia, Scotland, Singapore and the United States. The visiting consultants represented both the public and private sectors, and attended the Consult at their own expense. The expertise represented by these consultants covered a broad spectrum of skills and experience. Specific professions included elementary and secondary school teaching specialists in language arts, curriculum design, child development and training techniques; business management, economics, marketing and finance; nutrition, medical science, health care and hospital administration, community planning and social development; agriculture, animal science and mariculture; architecture, construction engineering, land development and surveying; demography; and sanitation engineering. The Bayad residents who attended likewise represented a wide range of occupations and expertise, including farming, homemaking, fruit growing, stone masonry, driving, handicrafts, riverboating, teaching and school administration, retailing, home construction, child care, animal husbandry, carpentry, machine maintenance and village administration. The rich source of expertise present at the Consult, in conjunction with the expansive dialogue between local, national and international consultants, paves the way for a new chapter in the history of Bayad.

PARTICIPANTS

This diversified group of consultants acted as a unified research body using methods of comprehensive community reformulation. First, the Consult charted the Operating Vision of the people of Bayad. Second, they discerned the Underlying Contradictions which are blocking the realization of that vision. Third, they built a set of overall Practical Proposals for dealing effectively with the Contradictions. Fourth, they created a set of Tactical Systems by which the proposals could be realized. Finally, they discerned the necessary programs which would allow the application of the Tactical Systems. The aim of the Consult was to assist the citizens of Bayad in accelerating the expansion of the project and empowering its impact upon the village.

DESIGN

IMPACT

The people of Bayad were pleased to have the Human Development Project get underway. Villagers participated in ever-increasing numbers as the Consult progressed. Elders and town leaders escorted consultants through Bayad's streets and the adjoining farmlands that separate the village from the Nile. A village leader remarked, "We extend our hand to your hand in rebuilding our village." Another revered local figure, who had attended a Consult elsewhere said, "We have seen your work in other places. Bayad, poorest village in the poorest province of Egypt, will be enthusiastic about the work of this week." Non-resident specialists from Beni Suef and Cairo worked night and day with villagers and other consultants to build a plan for village reformulation. It was a measure of the seriousness with which this consultation was viewed by the government that on the final day of the Consult an emissary from the Beni Suef Governorate announced the arrival of a long awaited electric generator for village use. The people of Bayad opened their homes as well as their hearts in a display of generosity that warmly related the consultants with their hosts. Anxious to discuss their needs and enthusiastic in suggesting solutions, they began to see that change was imminent. "Before you came," a farmer smiled, "I believed nothing could change. Now I see it is possible." The elementary school lacks educational tools. The headmaster welcomed maps of Egypt, the Middle East and Africa. Several villagers escorting the consultants through Bayad said, "The project is beginning just in time." And in fact, the obstacles that challenge Bayad are strikingly similar to the problems that confront people in most of Egypt's villages and hamlets. The enthusiastic comments of the Director-General of Social Affairs, representing the Governor at the final plenary were an indication on the part of the government that the Human Development Project now beginning in Bayad can be replicated in the Arab Republic of Egypt.

FOLLOW UP

The task following the Consult is to initiate the implementation of the tactics which are focused in the Actuating Programs reported in this document. First, this will involve the ongoing meeting of the local leaders, the residents of Bayad who participated in the Consult, and other interested community people in planning program implementaries. Second, the initiation of special training sessions for the villagers who will bear responsibility for major aspects of the project will be needed, as well as the gathering of an inclusive community consensus concerning all aspects of the project. Third, project initiation will require continuing and expanding relations with the public sector. It will also be necessary to develop support systems in the private arena with the Egyptian business community and with professional and business contacts beyond the nation. Finally, project initiation requires that a catalytic staff reside in the community to begin training and building incentive that will raise a community-wide sign of social renewal.

III

THE PRESUPPOSITIONS

Virtually any local community contains the elements required for a Human Development Project. In the past 20 years, the work of the Institute of Cultural Affairs in rural villages, urban neighborhoods, and suburban towns across the globe has confirmed the fact that wherever there is local community, there is the readiness and the need for creative social change. There are five guidelines which serve as reference points in the formation of Human Development Projects. First, the selection of a community is guided by the understanding that the project is a demonstration of the possibility of comprehensive development in any local community. A project site has maximum demonstration potential when it is accessible. The use of effective social methods in widely diverse situations demonstrates the possibility of development in every local situation. Second, a potential location will be characterized by apparent hopelessness and the absence of community projects. The initiation of a project in the midst of visible human suffering dramatizes the possibility of dealing with human need. Third, both social and economic development measures are necessary to provide comprehensiveness and depth. When one dimension is emphasized at the expense of the other, superficial social change results. Fourth, both local and outside perspectives are required in planning a Human Development Project. The creative interplay of local and outside viewpoints assures the project of local authenticity and global relevance. Fifth, it is necessary to discern from the beginning the viability of the systematic replication of the pilot across a more inclusive geographical area. This provides a context for anticipating the demonstration power of the pilot and for projecting the acceleration required if the pilot is to function as a training base for replication forces.

FORMATION

ECONOMIC

Effective economic development at the local level rests upon five principles. First, the community must be imagined as a self-contained independent economic entity whose development is a priority. Without this focus attempts toward economic development are easily dissipated. Second, schemes increasing the flow of money into the community need to be devised. This can be done by increasing the production of raw materials and goods

sold outside the area, by employing local residents, by attracting non-resident shoppers, by borrowing money and extending credit lines, by using state and federal funds, and in some instances by soliciting special cash grants and donations in-kind. Third, as many externally injected funds as possible must be retained in the community as long as possible. This can be done by producing locally as many of the consumable goods and services as possible, by expanding local industry and business and by creating expertise on the local level. Fourth, the funds injected and retained must be rapidly and continuously circulated within the local economic unit. This is most crucial, for money needs to turn over many times before it is exchanged outside the community. Fifth, although the community must strengthen its own economy, it must also function in harmony with more inclusive economic realities on the municipal, state, regional, national, and international levels.

SOCIAL

There are five foundational guidelines in the arena of social development. First, the project has a clearly delineated geographical focus. This concentrates energy upon a social unit small enough to be dealt with, thereby avoiding needless dissipation of effort. This geographical approach also helps to catalyze community identity. Second, all community problems are dealt with simultaneously. The complex interacting relationships of community life consign a partial approach to failure. Third, the depth human issue beneath all the underlying socio-economic contradictions is discerned and addressed. As this occurs, people are released to see the possibility of effective engagement in arenas previously considered impossible. Fourth, particular effort is made to involve all social and age groups in the task of recreating the community. Finally, social symbols are employed as the key to mobilizing community effort and occasioning profound transformation. Powerful symbols provide the basis for common effort in the daily practicalities of the project; thus, they can be the difference between social despair and creative engagement.

ACTUATION

The actuation of a Human Development Project involves the application of five guidelines to establish the support systems for effective implementation. First, the coordinated effort of both the public and private sectors is needed. The combined assistance of both sectors in the form of consultant services, funding, and material contributions provide sustained support for the project as a whole as well as its specific parts. Second, the widespread participation of community residents in the implementation of all the programs is necessary from the outset. This role cannot be performed by someone else if local community development is to occur. Third, the presence of a catalytic staff of consultants is necessary for a period of time to generate momentum for leadership development. Through training in practical methods, the community's motivity and decision to engage in the human development task is sustained. Fourth, actuating agencies to

to oversee the social and economic development programs are required to ensure the coordination and direction of all implementation efforts in a unified thrust. Such agencies can take many forms but always represent a cross-section of the whole community, thereby building the cooperation vital to effective results in every program arena within a period of six to twelve months. Although the acceleration and stabilization of leadership training and program implementation must be phased over a number of years, dramatic signs of socio-economic development are required during the first year. These demonstrate the actuation of a comprehensive plan and thereby serve to constantly broaden local engagement and build human motivity. These are the marks of effective development.

IV

THE APPLICATION

DOCUMENT

The body of the following summary document contains the detailed findings of the Consult. It is divided into five parts. Part I deals with the Operating Vision; Part II, the Underlying Contradictions; Part III, the Practical Proposals; Part IV, the Tactical Systems; Part V, the Actuating Programs. The first two paragraphs in each section explain the intent and the process of that phase of the Consult. Subsequent paragraphs discuss the particular findings of each phase. Each part of the document also contains one or more holding charts which illustrate specific aspects of the narrative and provide an overview for the entire section. The concluding section offers insights and recommendations about matters such as project funding, phasing, designs, staff requirements, and replication possibilities and procedures.

PRACTICALITY

This summary report is intended to be a highly practical tool. It summarizes the results of the research which involved the people of Bayad in creatively focusing their efforts and concerns on the task of reshaping their village. As such, the document symbolizes the residents' decision to participate in practical decision-making about the future of their community and thereby serves to call forth the incentive needed for project actuation. The document will also function as an educational tool for rapidly training local leaders in the principles and methods of comprehensive community reformulation. The opening paragraphs in each section explain the intent and the process of that phase of the Consult. Subsequent paragraphs discuss the practical results of each phase. Each section contains at least one holding chart which provides a broad overview and illustrates specific aspects of the prose discussion. Finally the document serves as a handbook for all those who will work in Bayad to supplement the project and as a guide to those who may replicate the Human Development Project elsewhere.

PART ONE

THE OPERATING VISION

I

VISION

The first task of the Consult consisted of objectifying the Operating Vision of the future shared by the people of Bayad. Such a vision for any people is never totally explicit. It is woven through their hopes and fears, their frustrations and yearnings. It is concealed in their stories and social structures and is suggested by their style, symbols and dreams. All of these are deeply a part of who they are and what they hope to become. Although such a vision may be initially unconscious, it represents a community's attitude toward itself and its destiny. Only when the vision is made manifest and a community consciously stands present to it, can local community development occur. The process of objectifying this vision in a formal model is lengthy because of its initially latent nature. This is explained in part by the fact that no community alone can grasp its own vision. It was only when the subjectivity of the local residents of Bayad was confronted by the objectivity of the guest consultants that the Operating Vision of the community emerged.

PROCESS

In order to discern this local vision, the consultants were divided into five teams and spent a whole day in the field becoming generally familiar with the community. In addition to an overall survey, each team was assigned to investigate closely a specific aspect of community life; agriculture, business and industry, services, social development and education. The teams covered the entire village, conversed informally with local residents, visited the farms and the desert, surveyed community facilities and were hosted by local residents in their homes. Through these activities, consultants were directly or indirectly in contact with almost all of the local residents. Workshop sessions were then conducted by each team to exchange reports on the hopes and desires of the community as discerned by the consultants. Finally, the 112 pieces of data from the five teams were ordered in the basic categories of the present model. Plate 1 gives rational objective form to the Operating Vision that exists in the understanding of the people of Bayad. It was in relationship to this model that the Underlying Contradictions could be discerned in the subsequent phase of the Consultation.

RESULT

The Operating Vision chart (Plate 1) is the result of the first phase of the Consult. Its four master categories indicate the overarching dimensions of the vision of the people of Bayad. Section A, entitled "Toward Providing Practical Training," expresses the village's understanding that there is a need for locally available structures of practical training to allow all residents to participate effectively in the full potential of the village. Section B, entitled "Toward Enabling Physical Development," points to the clear need for improvement in the arenas of health, building construction, and essential services. Section C, entitled "Toward Ensuring Economic Development," articulates the community's desire to foster local economic self-sufficiency by expanding agriculture, developing industry and creating improved marketing systems. Section D, entitled "Toward Encouraging Social Well-Being," reveals the need for a coordinated effort to be made in the area of developing enriched social structures and patterns. The vision chart is further divided into eight major sections within which there are twenty-eight components. These are then subdivided into a total of 112 individual items, each representing a facet of the Operating Vision of Bayad residents. It is in these individual items that the practical substance of the vision is held. One of the major sections deals with the provision of practical training. Three others deal with enabling physical development; through community health, village construction, and essential services. Three additional ones are concerned with expanded agriculture, commercial industry and local marketing which will ensure a revitalized local economy. The final major section deals with encouraging the total social well-being of all the people of Bayad.

II

TRAINING

One of the major themes in the Operating Vision of the people of Bayad is providing the practical training needed to enable comprehensive development of the village. The four arenas of concern are; formal schooling, functional skills, adult education and vocational preparation. The residents of Bayad see that expanding the primary school, adding a preparatory school, ensuring full educational opportunity and providing the resources of a library are all important factors in their total education. At the same time, it is evident that training in functional skills such as sewing, health and equipment repair is equally necessary. A particular concern is focused in the arena of life-long adult education, travel opportunities and exposure to the rest of the world, enabling residents to extend their education throughout their entire lifetime. The final dimension of functional training needed in the village of Bayad is vocational preparation that would provide residents with useful skills in such areas as electricity, maintenance, nursing, carpentry and animal husbandry.

PHYSICAL

The physical development of Bayad is seen by the citizens as one of the primary village concerns. Community health, village construction and essential services are the arenas in which the hopes of the people are focused. The villagers are concerned about waste disposal, clean roads and the general improvement of public sanitation. Comprehensive medical services are needed to ensure that ongoing and preventive health care of all residents is available locally at all times. The construction and rehabilitation of improved housing and public buildings is a critical need, both in functional capacity and artful design. Services that are essential to the overall development of Bayad include a domestic water supply, village electrification, improved transportation services, better communications and provision of basic equipment for public use.

ECONOMIC

The third major area of the Operating Vision is concerned with the economic development of Bayad. The villagers' dream is to see the agricultural potential actualized, commercial industry developed and local marketing systems improved. In the arena of agricultural expansion, desert reclamation schemes, island development and more effective means of cultivation are critical. Additional dimensions of improved agriculture are intensifying farm production, introducing new crops and enabling superior stock production. Local commercial development is envisioned through a flour mill, textile production and construction materials industries which provide increased community income and an expanded field of job opportunities for Bayad. Stone-cutting, pottery works and cottage crafts would provide employment, income and expanded use of locally available materials. Cooperative ventures would include corporate purchasing, a produce market, an equipment pool and a community store. The initiation of consumer services such as a consumer society, a local village market and a community bakery are vitally needed to provide a local outlet for producers and low prices for customers. Financial services and support are a fundamental need in terms of providing banking services, a credit union, lines of access to the broader financial community and outlets for export of local products.

WELL-BEING

The final major area of concern revealed includes better recreation, more complete community care, improved physical environment and expanded women's roles. It is felt by the residents that structuring recreational opportunities such as planned children's activities and quality sports programs, facilities and equipment would be important to the social development of the village. Caring for the total life of the residents through activities such as family development, creating a community center, celebrative meals and events, and structured care for orphans is seen as a deep community need. In addition the residents of Bayad see that planting shade trees and shrubs, cleaning public areas and controlling dust would greatly enhance the physical environment.

There is a concern for the broadening of women's roles to include employment opportunities, family planning, public facilities such as ovens for common use and other essential tasks which would give women a way to participate more fully in the total life of the community.

PHYSICAL

ECONOMIC

WELL-BEING

| A - toward PROVIDING PRACTICAL TRAINING practical preparation | | B - toward PROVIDING PHYSICAL DEVELOPMENT supportive infrastructure | | | | C - toward ENSURING ECONOMIC DEVELOPMENT foundational sustenance | | | D - toward ENCOURAGING SOCIAL WELL BEING communal identity | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--------------------|---|------------------------|----------------------------|----------------------|--|------------------------------|---------------------------------------|---|----------------------------------|----------------------------|-----------------------------|--------------------------------|------------------------------|-------------------------------|-------------------------------|---------------------------|-------------------------|-------------------------------------|-------------------------------|--------------------------------|----------------------------|-----------------------------------|--------------------------|----------------------------|-----------------------------|---------------------------|----------------------|-----------------------|---------------------|-----------------------|---------------------------|--------------------------|---------------------------------|------------------------|-----------------|---------------------|----------------|--------------------|--------------------|----------------------|-----------------------|
| LOCAL EDUCATION | | COMMUNITY HEALTH | VILLAGE CONSTRUCTION | ESSENTIAL SERVICES | EXPANDED AGRICULTURE | COMMERCIAL INDUSTRY | LOCAL MARKETING | COMMUNITY LIFE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | II | III | IV | V | VI | VII | VIII | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preparatory School | Primary Expansion | Full Opportunity | Mobile Library | teaching FUNCTIONAL SKILLS | Health Training | enlarging MEDICAL SERVICES | enlarging COMMUNITY SERVICES | enlarging PHYSICAL ENVIRONMENT | enlarging SOCIAL WELL BEING | enlarging COMMUNAL IDENTITY | enlarging LOCAL EDUCATION | enlarging COMMUNITY HEALTH | enlarging VILLAGE CONSTRUCTION | ensuring PURE WATER | directing LAND DEVELOPMENT | starting BUSINESS DEVELOPMENT | starting LOCAL PRODUCTION | starting COMMUNITY LIFE | starting RECREATIONAL OPPORTUNITIES | starting CORPORATE PURCHASING | starting CHILDREN'S ACTIVITIES | starting CLUB FACILITIES | starting SPORTS EQUIPMENT | starting ORPHAN'S CARE | starting CELEBRATIVE MEALS | starting FAMILY DEVELOPMENT | starting COMMUNITY CENTER | starting SHADE TREES | starting GREEN SHRUBS | starting PLAY AREAS | starting DUST CONTROL | starting SIGNIFICANT WORK | starting FAMILY PLANNING | starting COLLEGIATE ASSOCIATION | starting PUBLIC OWNERS | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Waste Disposal | Substantial Roofing | Sanitary Wells | Desert Reclamation | Job Opportunities | Corporate Purchasing | Corporate Games |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Street Cleaning | Community Showers | Delivery Pumps | Island Use | Flour Mill | Produce Market | Children's Activities |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Public Toilets | Adequate Insulation | Piped System | Irrigation System | Textile Production | Equipment Pool | Club Facilities |
| Equipment Repair | Emergency Services | Drinking Supply | Home Illumination | Ownership Extension | Community Store | Sports Equipment | CO-OP VENTURES | Organizing RECREATIONAL OPPORTUNITIES | Organizing CORPORATE PURCHASING | Organizing CHILDREN'S ACTIVITIES | Organizing CLUB FACILITIES | Organizing SPORTS EQUIPMENT | Organizing ORPHAN'S CARE | Organizing CELEBRATIVE MEALS | Organizing FAMILY DEVELOPMENT | Organizing COMMUNITY CENTER | Organizing SHADE TREES | Organizing GREEN SHRUBS | Organizing PLAY AREAS | Organizing DUST CONTROL | Organizing SIGNIFICANT WORK | Organizing FAMILY PLANNING | Organizing COLLEGIATE ASSOCIATION | Organizing PUBLIC OWNERS | | | | | | | | | | | | | | | | | | |
| Health Training | Emergency Services | Street Cleaning | Home Illumination | Storage Systems | Consumer Society | Family Development | CO-OP VENTURES | Organizing RECREATIONAL OPPORTUNITIES | Organizing CORPORATE PURCHASING | Organizing CHILDREN'S ACTIVITIES | Organizing CLUB FACILITIES | Organizing SPORTS EQUIPMENT | Organizing ORPHAN'S CARE | Organizing CELEBRATIVE MEALS | Organizing FAMILY DEVELOPMENT | Organizing COMMUNITY CENTER | Organizing SHADE TREES | Organizing GREEN SHRUBS | Organizing PLAY AREAS | Organizing DUST CONTROL | Organizing SIGNIFICANT WORK | Organizing FAMILY PLANNING | Organizing COLLEGIATE ASSOCIATION | Organizing PUBLIC OWNERS | | | | | | | | | | | | | | | | | | |
| Health Training | Emergency Services | Public Toilets | Street Lighting | Hybridization Techniques | Village Market | Local Bakery | CO-OP VENTURES | Organizing RECREATIONAL OPPORTUNITIES | Organizing CORPORATE PURCHASING | Organizing CHILDREN'S ACTIVITIES | Organizing CLUB FACILITIES | Organizing SPORTS EQUIPMENT | Organizing ORPHAN'S CARE | Organizing CELEBRATIVE MEALS | Organizing FAMILY DEVELOPMENT | Organizing COMMUNITY CENTER | Organizing SHADE TREES | Organizing GREEN SHRUBS | Organizing PLAY AREAS | Organizing DUST CONTROL | Organizing SIGNIFICANT WORK | Organizing FAMILY PLANNING | Organizing COLLEGIATE ASSOCIATION | Organizing PUBLIC OWNERS | | | | | | | | | | | | | | | | | | |
| Health Training | Emergency Services | Public Toilets | Village-wide Extension | Feed Crops | Local Nursery | Local Bakery | CO-OP VENTURES | Organizing RECREATIONAL OPPORTUNITIES | Organizing CORPORATE PURCHASING | Organizing CHILDREN'S ACTIVITIES | Organizing CLUB FACILITIES | Organizing SPORTS EQUIPMENT | Organizing ORPHAN'S CARE | Organizing CELEBRATIVE MEALS | Organizing FAMILY DEVELOPMENT | Organizing COMMUNITY CENTER | Organizing SHADE TREES | Organizing GREEN SHRUBS | Organizing PLAY AREAS | Organizing DUST CONTROL | Organizing SIGNIFICANT WORK | Organizing FAMILY PLANNING | Organizing COLLEGIATE ASSOCIATION | Organizing PUBLIC OWNERS | | | | | | | | | | | | | | | | | | |
| Health Training | Emergency Services | Public Toilets | Machine Power | Processing Plant | Dairy Items | Local Bakery | CO-OP VENTURES | Organizing RECREATIONAL OPPORTUNITIES | Organizing CORPORATE PURCHASING | Organizing CHILDREN'S ACTIVITIES | Organizing CLUB FACILITIES | Organizing SPORTS EQUIPMENT | Organizing ORPHAN'S CARE | Organizing CELEBRATIVE MEALS | Organizing FAMILY DEVELOPMENT | Organizing COMMUNITY CENTER | Organizing SHADE TREES | Organizing GREEN SHRUBS | Organizing PLAY AREAS | Organizing DUST CONTROL | Organizing SIGNIFICANT WORK | Organizing FAMILY PLANNING | Organizing COLLEGIATE ASSOCIATION | Organizing PUBLIC OWNERS | | | | | | | | | | | | | | | | | | |
| Health Training | Emergency Services | Public Toilets | Lower Prices | Local Nursery | Egg Production | Local Bakery | CO-OP VENTURES | Organizing RECREATIONAL OPPORTUNITIES | Organizing CORPORATE PURCHASING | Organizing CHILDREN'S ACTIVITIES | Organizing CLUB FACILITIES | Organizing SPORTS EQUIPMENT | Organizing ORPHAN'S CARE | Organizing CELEBRATIVE MEALS | Organizing FAMILY DEVELOPMENT | Organizing COMMUNITY CENTER | Organizing SHADE TREES | Organizing GREEN SHRUBS | Organizing PLAY AREAS | Organizing DUST CONTROL | Organizing SIGNIFICANT WORK | Organizing FAMILY PLANNING | Organizing COLLEGIATE ASSOCIATION | Organizing PUBLIC OWNERS | | | | | | | | | | | | | | | | | | |
| Health Training | Emergency Services | Public Toilets | Linking Arteries | Processing Plant | Cash Crops | Local Bakery | CO-OP VENTURES | Organizing RECREATIONAL OPPORTUNITIES | Organizing CORPORATE PURCHASING | Organizing CHILDREN'S ACTIVITIES | Organizing CLUB FACILITIES | Organizing SPORTS EQUIPMENT | Organizing ORPHAN'S CARE | Organizing CELEBRATIVE MEALS | Organizing FAMILY DEVELOPMENT | Organizing COMMUNITY CENTER | Organizing SHADE TREES | Organizing GREEN SHRUBS | Organizing PLAY AREAS | Organizing DUST CONTROL | Organizing SIGNIFICANT WORK | Organizing FAMILY PLANNING | Organizing COLLEGIATE ASSOCIATION | Organizing PUBLIC OWNERS | | | | | | | | | | | | | | | | | | |
| Health Training | Emergency Services | Public Toilets | Pedestrian Pathways | Local Nursery | Demonstration Plot | Local Bakery | CO-OP VENTURES | Organizing RECREATIONAL OPPORTUNITIES | Organizing CORPORATE PURCHASING | Organizing CHILDREN'S ACTIVITIES | Organizing CLUB FACILITIES | Organizing SPORTS EQUIPMENT | Organizing ORPHAN'S CARE | Organizing CELEBRATIVE MEALS | Organizing FAMILY DEVELOPMENT | Organizing COMMUNITY CENTER | Organizing SHADE TREES | Organizing GREEN SHRUBS | Organizing PLAY AREAS | Organizing DUST CONTROL | Organizing SIGNIFICANT WORK | Organizing FAMILY PLANNING | Organizing COLLEGIATE ASSOCIATION | Organizing PUBLIC OWNERS | | | | | | | | | | | | | | | | | | |
| Health Training | Emergency Services | Public Toilets | Access Roads | Local Nursery | Available Fertilizer | Local Bakery | CO-OP VENTURES | Organizing RECREATIONAL OPPORTUNITIES | Organizing CORPORATE PURCHASING | Organizing CHILDREN'S ACTIVITIES | Organizing CLUB FACILITIES | Organizing SPORTS EQUIPMENT | Organizing ORPHAN'S CARE | Organizing CELEBRATIVE MEALS | Organizing FAMILY DEVELOPMENT | Organizing COMMUNITY CENTER | Organizing SHADE TREES | Organizing GREEN SHRUBS | Organizing PLAY AREAS | Organizing DUST CONTROL | Organizing SIGNIFICANT WORK | Organizing FAMILY PLANNING | Organizing COLLEGIATE ASSOCIATION | Organizing PUBLIC OWNERS | | | | | | | | | | | | | | | | | | |
| Health Training | Emergency Services | Public Toilets | Telephone Extension | Local Nursery | Pest Control | Local Bakery | CO-OP VENTURES | Organizing RECREATIONAL OPPORTUNITIES | Organizing CORPORATE PURCHASING | Organizing CHILDREN'S ACTIVITIES | Organizing CLUB FACILITIES | Organizing SPORTS EQUIPMENT | Organizing ORPHAN'S CARE | Organizing CELEBRATIVE MEALS | Organizing FAMILY DEVELOPMENT | Organizing COMMUNITY CENTER | Organizing SHADE TREES | Organizing GREEN SHRUBS | Organizing PLAY AREAS | Organizing DUST CONTROL | Organizing SIGNIFICANT WORK | Organizing FAMILY PLANNING | Organizing COLLEGIATE ASSOCIATION | Organizing PUBLIC OWNERS | | | | | | | | | | | | | | | | | | |
| Health Training | Emergency Services | Public Toilets | Postal Service | Local Nursery | Rabbit Raising | Local Bakery | CO-OP VENTURES | Organizing RECREATIONAL OPPORTUNITIES | Organizing CORPORATE PURCHASING | Organizing CHILDREN'S ACTIVITIES | Organizing CLUB FACILITIES | Organizing SPORTS EQUIPMENT | Organizing ORPHAN'S CARE | Organizing CELEBRATIVE MEALS | Organizing FAMILY DEVELOPMENT | Organizing COMMUNITY CENTER | Organizing SHADE TREES | Organizing GREEN SHRUBS | Organizing PLAY AREAS | Organizing DUST CONTROL | Organizing SIGNIFICANT WORK | Organizing FAMILY PLANNING | Organizing COLLEGIATE ASSOCIATION | Organizing PUBLIC OWNERS | | | | | | | | | | | | | | | | | | |
| Health Training | Emergency Services | Public Toilets | Media Availability | Local Nursery | Fish Farm | Local Bakery | CO-OP VENTURES | Organizing RECREATIONAL OPPORTUNITIES | Organizing CORPORATE PURCHASING | Organizing CHILDREN'S ACTIVITIES | Organizing CLUB FACILITIES | Organizing SPORTS EQUIPMENT | Organizing ORPHAN'S CARE | Organizing CELEBRATIVE MEALS | Organizing FAMILY DEVELOPMENT | Organizing COMMUNITY CENTER | Organizing SHADE TREES | Organizing GREEN SHRUBS | Organizing PLAY AREAS | Organizing DUST CONTROL | Organizing SIGNIFICANT WORK | Organizing FAMILY PLANNING | Organizing COLLEGIATE ASSOCIATION | Organizing PUBLIC OWNERS | | | | | | | | | | | | | | | | | | |
| Health Training | Emergency Services | Public Toilets | Beni Suef Bridge | Local Nursery | Poultry Enterprise | Local Bakery | CO-OP VENTURES | Organizing RECREATIONAL OPPORTUNITIES | Organizing CORPORATE PURCHASING | Organizing CHILDREN'S ACTIVITIES | Organizing CLUB FACILITIES | Organizing SPORTS EQUIPMENT | Organizing ORPHAN'S CARE | Organizing CELEBRATIVE MEALS | Organizing FAMILY DEVELOPMENT | Organizing COMMUNITY CENTER | Organizing SHADE TREES | Organizing GREEN SHRUBS | Organizing PLAY AREAS | Organizing DUST CONTROL | Organizing SIGNIFICANT WORK | Organizing FAMILY PLANNING | Organizing COLLEGIATE ASSOCIATION | Organizing PUBLIC OWNERS | | | | | | | | | | | | | | | | | | |
| Health Training | Emergency Services | Public Toilets | Fire Engines | Local Nursery | Cattle Project | Local Bakery | CO-OP VENTURES | Organizing RECREATIONAL OPPORTUNITIES | Organizing CORPORATE PURCHASING | Organizing CHILDREN'S ACTIVITIES | Organizing CLUB FACILITIES | Organizing SPORTS EQUIPMENT | Organizing ORPHAN'S CARE | Organizing CELEBRATIVE MEALS | Organizing FAMILY DEVELOPMENT | Organizing COMMUNITY CENTER | Organizing SHADE TREES | Organizing GREEN SHRUBS | Organizing PLAY AREAS | Organizing DUST CONTROL | Organizing SIGNIFICANT WORK | Organizing FAMILY PLANNING | Organizing COLLEGIATE ASSOCIATION | Organizing PUBLIC OWNERS | | | | | | | | | | | | | | | | | | |
| Health Training | Emergency Services | Public Toilets | Passenger Vehicle | Local Nursery | | Local Bakery | CO-OP VENTURES | Organizing RECREATIONAL OPPORTUNITIES | Organizing CORPORATE PURCHASING | Organizing CHILDREN'S ACTIVITIES | Organizing CLUB FACILITIES | Organizing SPORTS EQUIPMENT | Organizing ORPHAN'S CARE | Organizing CELEBRATIVE MEALS | Organizing FAMILY DEVELOPMENT | Organizing COMMUNITY CENTER | Organizing SHADE TREES | Organizing GREEN SHRUBS | Organizing PLAY AREAS | Organizing DUST CONTROL | Organizing SIGNIFICANT WORK | Organizing FAMILY PLANNING | Organizing COLLEGIATE ASSOCIATION | Organizing PUBLIC OWNERS | | | | | | | | | | | | | | | | | | |
| Health Training | Emergency Services | Public Toilets | Heavy Machinery | Local Nursery | | Local Bakery | CO-OP VENTURES | Organizing RECREATIONAL OPPORTUNITIES | Organizing CORPORATE PURCHASING | Organizing CHILDREN'S ACTIVITIES | Organizing CLUB FACILITIES | Organizing SPORTS EQUIPMENT | Organizing ORPHAN'S CARE | Organizing CELEBRATIVE MEALS | Organizing FAMILY DEVELOPMENT | Organizing COMMUNITY CENTER | Organizing SHADE TREES | Organizing GREEN SHRUBS | Organizing PLAY AREAS | Organizing DUST CONTROL | Organizing SIGNIFICANT WORK | Organizing FAMILY PLANNING | Organizing COLLEGIATE ASSOCIATION | Organizing PUBLIC OWNERS | | | | | | | | | | | | | | | | | | |
| Health Training | Emergency Services | Public Toilets | Improved Implements | Local Nursery | | Local Bakery | CO-OP VENTURES | Organizing RECREATIONAL OPPORTUNITIES | Organizing CORPORATE PURCHASING | Organizing CHILDREN'S ACTIVITIES | Organizing CLUB FACILITIES | Organizing SPORTS EQUIPMENT | Organizing ORPHAN'S CARE | Organizing CELEBRATIVE MEALS | Organizing FAMILY DEVELOPMENT | Organizing COMMUNITY CENTER | Organizing SHADE TREES | Organizing GREEN SHRUBS | Organizing PLAY AREAS | Organizing DUST CONTROL | Organizing SIGNIFICANT WORK | Organizing FAMILY PLANNING | Organizing COLLEGIATE ASSOCIATION | Organizing PUBLIC OWNERS | | | | | | | | | | | | | | | | | | |

PART TWO

UNDERLYING CONTRADICTIONS

CONTRADICTIONS

The second task of the Consult was to locate the basic social contradictions in Bayad. The term "contradiction", as it is used here, does not refer to obvious problems, but to coagulations of underlying blocks to the Operating Vision. Contradictions are closely related to relatively invisible, deep currents of history and, therefore, are difficult to discern. They cannot be located directly, but must be approached indirectly through identification of the deterrents and blocks to the Operating Vision of the people. It is by looking through the blocks in relation to the objective historical trends that the Underlying Contradictions can be located. If the Underlying Contradictions are not at least roughly discerned, there is little chance of success in planned social change. Effective socio-economic development does not come about by attempting to achieve the explicit or implicit goals of the Operating Vision in a direct fashion. Rather, social change occurs indirectly, by creating Practical Proposals to deal with the Underlying Contradictions to the Operating Vision. For this reason, contradictions are not negative categories, but bearers of significant creativity.

PROCESS

In order to generate local data relating to the contradictions, the consultants continued to work as teams in the field. Each team concerned itself first with discerning the blocks to the total Operating Vision (Plate 1) and then focused in depth on its particular assigned arena of the Vision. In this way, the values of both comprehensiveness and depth were held in the team's overall analysis. Keeping in mind the profound trends of history which had been the subject of an earlier conversation among the total consult, the teams discerned the subjective irritants as revealed by the field visits in order to identify the objective deterrents to the Practical Vision. Upon returning from the field, each team listed its data and built a prioritized list of blocks to the total Vision. The 119 pieces of data were then organized into a comprehensive set of 9 Underlying Contradictions facing the people of Bayad.

Nine fundamental contradictions were discerned as indicated by the accompanying chart (Plate 2). Under these nine contradictions are subsumed all the specific deterrents, irritants or socio-economic blocks identified in Bayad by the consultants. The chart's priorities read from left to right according to the number of items listed under each contradiction. The chart also delineates the sub-priorities within each of the nine columns as a further guide to understanding each major contradiction. This method of ordering is not the only criterion for discerning major contradictions. It is, however, an informative way to view the whole matrix of the contradictions operating in a given situation. The reader will note that the bottom of the chart delineates the number of responses in each column and reflects four overarching groups of contradictions. These figures are an additional aid to contradiction analysis. There are 119 items listed on the whole chart. The first two contradictions list 45 responses, or 38% of the total. The next three contradictions (III, IV, and V) total 38 responses, or 32% when viewed as a group. The next three contradictions (VI, VII, and VIII) are the third grouping, and represent 31 responses, or 26%. The fourth group is Contradiction IX totaling 5 responses, and represents 4% of the total. This pattern of contradiction analysis reveals several basic implications. The first two contradictions are concerned with the loss of corporate initiative due to new lines of authority in the village, thereby removing from the village the means for rendering its basic resources productive for all the residents. Group two points to the fact that most of the various avenues for conveying modern techniques to the villages are not opened sufficiently to provide for a trained population. The third group is an array of sustaining elements needed for community development: the full engagement of the residents, sufficient capital and the health of the people. The last contradiction points to the possibility of cultural enlargement for the individuals and families of the village. These nine contradictions provide the basis for future proposals. The following pages contain a concise one-paragraph statement for each contradiction.

RESULT

UNDERLYING CONTRADICTIONS CHART

ICA Consultants

Plate 2

| I CUMULATIVE DEPLETION OF CORPORATE INITIATIVE | II UNDERDEVELOPED POTENTIAL OF BASIC RESOURCES | III DYSFUNCTIONAL SYSTEM OF PRACTICAL EDUCATION | IV LIMITED & AVAILABILITY OF FUNCTIONAL INFORMATION | V MINIMAL ACCESS TO TECHNOLOGICAL RESOURCES | VI CONFINED ARENAS FOR COMMUNITY ENGAGEMENT | VII STRAINED SOURCES OF VILLAGE CAPITAL | VIII DISRUPTED MECHANISMS FOR COMMUNITY HEALTH | IX RESTRICTIVE CHANNELS OF CULTURAL INTERCHANGE |
|--|--|---|---|---|---|---|--|---|
| Awaiting outside approval | Overdemand on resources | Automatic grade promotion | Uncontexted family planning | Inaccessible building supplies | Few community- wide events | Little risk capital | Prevalence of Bilharzia | Narrow external contact |
| Isolated village mindset | Sparse arable land | Low performance requirements | Reduced family education | Inoperative pump- ing equipment | Family-oriented socializing | Reduced buying power | Extensive dusty roads | Few family services |
| Longterm external dependency | Scant animal feed | Illiteracy hampers skills | Birth control misinformation | Limited drilling equipment | Crowded family housing | Insufficient personal income | Below par health | Women kept at home |
| Frustrated past goals | Available land waterless | Static school curriculum | Welfare benefit unawareness | Unextended construction methods | Unsupportable family size | Lack stored capital | Deficient dietary balance | Few travel opportunities |
| Drained community confidence | Subsidized fertilizer scarcity | Limited educational vision | Insufficient health education | Low-level technical skills | Adult recreation reduced | Village economic isolation | Unsanitary water supply | Women's travel prohibitive |
| Outside program overdependence | Land ownership static | Ineffective in-service training | Untaught sanitary practices | Limited financial knowhow | Few residential teachers | Distant wholesale facilities | Minimal toilet facilities | |
| Dependence on city | Unavailability of timber | Unskilled program development | Restrictive teaching methods | Underdeveloped water management | Inadequate parent- school liaison | Expensive school transport | Inadequate animal shelter | |
| Dominated women's behavior | Land acquisition difficult | Blocked parental participation | Unknown desert potential | Imprecise irrigation methods | Limited organized recreation | Costly health care | Animal care unhygienic | |
| Depreciated community identity | Island not irrigated | Irrelevant adult education | Unenvisioned construction methods | Undeveloped husbandry training | No after-school activities | High-priced fertilizers | Quality medicine unavailable | |
| Community ownership undemonstrated | Unequipped health services | Fish potential unknown | Unexplored business opportunities | Misuse of fertilizers | Limited study time | Limited health subsidies | Doctor's hours irregular | |
| Sociality reduced to work | Local dentist unavailable | Inappropriate basic hygiene | Unproductive bee raising | Individualized marketing practices | Minimal sports equipment | | | |
| Individualistic ferry use | Insufficient com- mercial facilities | Curbed learning incentive | Untapped outside funds | Untapped power supply | | | | |
| Uncorporate economic structure | Few salaried jobs | Inappropriate rote learning | | | | | | |
| Unresponsive social services | Irregular transport service | Audio-visual media absent | | | | | | |
| Distant health care | Undependable river transport | | | | | | | |
| Unsuccessful economic ventures | Undeveloped request skills | | | | | | | |
| Remote government agencies | Isolated east bank | | | | | | | |
| Inaccessible medical care | Expensive bus service | | | | | | | |
| Poor communication channels | Partial pest control | | | | | | | |
| Poverty blocking health | Undependable telephone service | | | | | | | |
| Legal land restraints | High-priced cooking fuel | | | | | | | |
| Unavailability of pumps | | | | | | | | |
| Delimited desert use | | | | | | | | |
| Canal access easy | | | | | | | | |
| 24 | 21 | 14 | 12 | 12 | 11 | 10 | 10 | 5 |
| I | | | II | | | III | | IV |

CONTRADICTION I

Cumulative Depletion of Corporate Initiative

The first contradiction involves the corporate initiative of the village. In the various local communities around the world a new practical hope among village people is emerging. Social care is once again being extended to every human being. In Bayad the educated, the farmer and the desert people are living together before a new national vision. They are a part of the rural development of 29,000 villages and hamlets in Egypt. However, social and economic development have not yet touched the village in a significant way. In some areas changes have appeared to hinder development rather than help it. Or plans have simply not materialized. Land reform as early as 1952 distributed the land on an equitable basis but it also limited the use of land in the interest of historical monuments. Basins near Bayad have been designated for reclamation but remain without irrigation. Resources and trained personnel have left the village without a corresponding return in services or training. As a result the village sees itself as more and more dependent on outside programs and agencies that seem remote and unresponsive. Many new services are nearby but out of reach. Water, health and sanitation services are present in Beni Suef. Such shifts of social care to the urban areas have left the village without access to the local expertise once enjoyed in the village. Like other East Bank villages, the people are aware of modern ways without having means for being self-sufficient. To the villager, what was once a contented, quiet desert village has become a remote, poor and dissatisfying place to live. Until Bayad once again regains its confidence as an agent of human care, it will be increasingly excluded and more deeply paralyzed from moving on urgent human issues.

CONTRADICTION II

Underdeveloped Potential of Basic Resources

The second contradiction has to do with the use and development of basic resources. In the 20th century the resources that are needed for the self-sufficiency of communities have expanded beyond natural resources to include techniques for communication, transportation, commerce and financing once considered luxuries. In the village of Bayad the resources that are being used are severely overtaxed while others are only beginning to be introduced. The current arable land is being stretched to support the village population.

Material coming from the land is used for every possible purpose. Cornstalks serve as cooking fuel, fodder and roofing. The land on the island is the richest silt imaginable and potentially productive, but, as yet, irrigation water has not been provided. Fertilizer and weed or pest control is available but more expensive than most farmers can afford. Land ownership remains a complex matter that seems to work against coordinated farming efforts. The newer resources such as radios and telephones, dependable transportation, local health services and commercial skills are near at hand or across the river but at present they are but a taste of what is needed for social and industrial development. Plans for all of these are in being but are slow in becoming readily available. The bridge to Beni Suef has been designed and the plans are drawn up to be implemented within three years. The current telephone cable is equipped to handle 35 phones but only three have been installed. The new veterinary hospital has recently been dedicated and provides only emergency services. The greatest pain comes as the villagers realize that the only obstacle to many of these improvements is their own lack of prowess in petition and negotiation. Until a concerted effort is made by the villagers to develop the potential and scope of their own resources, Bayad will be denied social and economic self-sufficiency and a contributing role in the global human community.

CONTRADICTION III

Dysfunctional Systems of Practical Education

The third contradiction is in the arena of comprehensive practical education for the whole community. Across the world today people see the need for continuing education in basic skills to meet the changing demands throughout their lives. In Bayad a primary school conducts classes 16 to 20 hours a week. The evaluation of parents and teachers alike indicates the need for more adequate and imaginative teaching methods in the school to stimulate learning incentives. The villagers report that young people remain illiterate even after six years in school. Many of the men and most women are illiterate in terms of a functional vocabulary as well as cultural skills in the larger society. Basic reading, writing and mathematics are more and more needed by village adults to comprehend official communications, instructions on health practices, and information on agricultural and commercial methods. Adequate literacy training is available in the Beni Suef preparatory schools and the national universities but Bayad young people are blocked from this in two ways: the additional expense and limited schedule of river travel, and the large number of young people from poorer families beginning work at an early age. Those who receive advanced training tend not to return to the village. The whole educational process in Bayad, as well as the wage scale, avoids bestowing sufficient prestige upon the skilled technical worker who is so

critically needed for new, small industries in villages like Bayad. Villagers of all ages are eager to learn additional skills, but they experience being thwarted from their dreams by the absence of relevant educational experiences. Until every villager is fully equipped with practical training for his lifelong daily tasks, the community will be crippled and will continue to lack the critical expertise needed for social and economic development.

CONTRADICTION IV

Limited Availability of Functional Information

The fourth contradiction concerns functional information needed for living in the world today. The 20th century world has emerged rapidly. Life involves an enlarging amount of technical instruction and information to carry out daily routines. This shift to a technological age has left behind villagers like the residents of Bayad, still using the practical skills that were appropriate to another age. They have received surface skills without the understanding necessary for their full application. Modern machines, chemical fertilizers, power saws, and birth control pills are being used by villagers. However, the information on their use is often incomplete. Birth control pills are thought to be a device for suppressing village population rather than a tool for planning and timing. The harmful effect of partial knowledge is compounded when villagers are unable to realize new economic possibilities open to them. Honey production and small businesses are blocked only by gaps in technical information. Building materials are all around the village, but the process of extraction, preparation and shipping comes as an overwhelming task. Other methods are available through government programs but require information and instruction on how applications may be submitted. Programs for nutrition, sanitation and preventive medicines need explanation. In general, the acquisition of functional information that would transform everyday life has thus far prompted confusion in uses and a basic misunderstanding of new scientific practices. Unless a way is found for thoroughly acquainting villagers with critically needed information, the people of Bayad will not be self-sufficient.

CONTRADICTION V

Minimal Access to Appropriate Technology

The fifth contradiction has to do with the acquisition of technological skills, machinery and technical services. Throughout society today, the physical and mental extension of human work through technology is built into the way the world functions. In Bayad this trend has been felt for a number of years as machinery of various types such as irrigation pumps have been

present in the village. However, the technical knowledge to keep them operating is lacking, as shown by the fact that there are 20 inoperative pumps stored in the village while at the same time the farmers ask for irrigation equipment. This knowledge is potentially available since similar engines in automobiles are kept in running order twenty years past their normal life. Other equipment, supplies, materials and skills needed for construction, health improvement, increasing farm production and small industry are available in Beni Suef, but techniques are expensive to obtain in both time and money. Water wells were dug in Bayad a few centuries ago, but today the story is prevalent that the village sits on a hill of stone too deep to penetrate with modern drilling equipment. Fertilizers and other chemicals available from the government require precision application for effective use. Even though their yields could be increased, the farmers do not have the necessary means for using them. Advanced technology could greatly improve livestock production, yet in Bayad husbandry goes on as it has for centuries. Commercial techniques of cooperative buying and selling are known yet not practiced by the vendors and private farmers. Most of the appropriate technology is available in Egypt today, yet it flows around and past the villagers of Bayad. Until technology is accessible and usable for the corporate benefit of Bayad, the accelerated advancement of village economy will be a dream to be achieved by others, accentuating a sense of helplessness among the people.

CONTRADICTION VI

Confined Arenas of Community Engagement

The sixth contradiction has to do with the total engagement of the entire community in creating its internal life. Societies across the globe are finding that every age group and social class has a vital role to play in developing each community within the global culture. In Bayad, youth, women, elders and unskilled adults are actively taking part in shaping the future of their community along with the active leadership of the village. The village clans are beginning to be interrelated across the nation and involved in the global economy. The villagers welcome strangers into their midst as an ancient custom. Broad social responsibility has been undertaken by the Village Council which represents a cluster of neighboring villages. But most families and individuals are burdened by the weight and expenditure of time related to subsistence living. The primary source of corporate life is the clan or extended family. Large gatherings of villagers occur mostly at feasts and holidays celebrated by a wider group. Working together in the fields, meeting along the roads, at the canal or in the home are virtually the only gatherings within the village other than celebrations for birth, betrothal, marriage, death or religious holidays. The clan also keeps to itself through the

practice of cousin marriages. The role of women symbolizes insularity within the village itself, separating neighbors and families from larger village responsibility. Walls enclose family activities. The school is conducted with little adult involvement because of illiteracy. The teachers live in Beni Suef creating distance from the community and their students. The relevance and responsiveness of such an institution depends on the involvement of the parents and other adults of the village. These internal social divisions prevent the significant engagement of everyone including the youth and their energy. Crowded homes and family size exceeding income capacity result in a withdrawal to the extended family unit. Until the total community is once more brought together in a uniting structure that cares for the whole village, Bayad will continue to be disabled and deprived of its own full human resources.

CONTRADICTION VII

Strained Sources of Village Capital

The seventh contradiction deals with the accumulation of capital needed to develop the village economy and to raise family incomes. The emerging global economy is increasingly calling upon local economic units and communities to sustain their own populace. Bayad is experiencing the strain of carrying its own weight as it participates more and more in the money economy. As bartering and in-kind wages to farm workers are replaced by money wages, land owners need more capital on hand. However, credit lines and banking are just beginning to be effective in the villages. While Bayad's economy requires diversified crops and the introduction of new cash crops, the capital to be risked in ventures such as soybeans is simply not available. Most of the population continues to exist at a subsistence level, working for low wages, or farming just enough land to provide for the family. Most of the money that is earned from marketed goods, from government purchases or from wages is spent in Beni Suef or farther away, taking money out of the community and bringing little back. The small shops in Bayad also bring only a small amount of capital into the village since goods are purchased at retail prices in Beni Suef and resold in the village for a small margin. Since the only significant transport of goods takes place on the West Bank, there is the additional cost of transport across the Nile. This results in an even higher cost of living for the East Bank villagers who already have a lower income than people on the West Bank. The villagers are aware of not having enough money and of never seeing any real change. Unless the villagers can together find a way to bring in more capital and to turn it over more times within the village, the economic gap between Bayad and the commercial and industrial centers can only become more acute and more dehumanizing.

CONTRADICTION VIII

Disrupted Mechanisms for Community Health

The eighth contradiction has to do with community health and individual physical well-being. Adequate health care is possible for every human being today. In Egypt, this trend has enabled a hospital and a resident physician to come to Bayad, though the facility is lacking even basic equipment and supplies. Still, the vitality of the people continues to be sapped by poor health and disease. Statistics indicate that 85% of the villagers are infected by parasites. Since the construction of the High Dam, the host snails for Bilharzia have increased at an alarming rate. The hospital in Beni Suef reports that 70% of its surgery cases are operations for the effects of Bilharzia. Meanwhile in the village, the residents are drinking and bathing in the Nile and an untreated irrigation canal. Human and animal waste is also deposited in the same water. Even if treatment for Bilharzia is increased, without concomitant changes in excreta disposal this threat to life and health will not be overcome. Infant death rates are alarmingly high and are caused by such diseases as diarrhea and measles, maladies easily controllable with the resources available in Beni Suef. Malnutrition in the 1-3 year-old age groups greatly compounds the health problems with the occurrence of rickets, scurvy, and protein deficiency. Eye diseases, diet deficiencies, desert and road dust are unnecessarily disabling the village work force. Poor toilet and sanitation facilities in most homes plus the presence of animals in the eating and living quarters perpetuate the spread of disease and harmful bacteria. The villagers are aware of these hazards, but they see no alternatives. While they are resigned to their fate to an extent, they are eager to take the necessary steps to restore health to themselves and their children. Until Bayad, along with other villages on the Nile, claims its right to a healthy environment and healthy bodies, the physical life of the village will become more and more in danger of extinction.

CONTRADICTION IX

Restrictive Channels of Cultural Interchange

The ninth contradiction has to do with the type of cultural interchange and exposure present in the village. Across the world, cultures and sub-cultures are encountering one another more frequently and more profoundly than they have for centuries. In fact, the interchange of styles, gifts, and ideas has become essential to human development. In Bayad, the past two centuries have included contact with various European peoples, with other Africans and with Asians. Before that the village was known to be a resting place between Sinai and the West Bank of

the Nile. The residents of Bayad know they are significantly affected by national and global events. They reach out by listening to radios in the streets and by conversing with neighbors in Beni Suef. These channels are but a trickle compared to what is needed and even desired. Travel across the Nile is the major contact with the world. Travel beyond that is almost inconceivable. Women especially do not expect to go far from the village walls. Resources for developing family life are thought to be a long way off and virtually inaccessible. The different experiences and the various educational options that enable people today to create an effective life style are few and seldom. Nor does the desert village culture of Bayad have a way of going outward to other parts of the country and the world. It is not that the residents of Bayad are closed off from cultural exposure. The familiar invitation of the stranger to tea or coffee indicates an open reception. But until a practical recovery of an ancient culture in modern dress takes place, the self-assertion necessary to play a significant role today will be futile, however vigorous.

PART THREE

THE PRACTICAL PROPOSALS

PROPOSALS

The third task of the Consult consisted of building the practical proposals. The term "proposal" refers to a strategic plan of action formulated in direct response to the Underlying Contradictions. Therefore, from the outset, proposals are grounded in the actual social situation, rather than being abstracted or superimposed as ideals. A proposal is similar to a goal, yet it is not a goal. While the Practical Vision reveals the conscious and unconscious image out of which the community operates, the practical proposals represent a clear image of the direction the community needs to move in relation to the contradictions. In this sense, proposals represent judgments or decisions about the future. A proposal, however, is never something which is performed. Rather, it points to the crucial arenas of action within which tactics are forged and implemented so that social change will occur.

PROCESS

In order to create the proposals the consultants continued to work as teams organized according to broad arenas of expertise. Following further opportunities for site visits in the field, each team forged a series of detailed proposals which articulated the major actions needed to address the entire swirl of contradictions blocking the operating vision. The proposals represent strategic formulations of practical yet inclusive possibilities for the Bayad community. Finally, the entire Consult, working as one body in a plenary session, organized the mass of data from the related proposals. The resulting model became the basis for developing the tactics required to shape the destiny of Bayad village.

RESULTS

The Practical Proposals Chart (Plate 3) is comprised of 28 proposals referred to as projects. They are organized under nine Master Proposals which reflect decisional responses to the major contradictions. Two of the nine Master Proposals relate to functional education within the community and call for the development of practical training and village extension beyond its own borders. Two others deal with securing local services through environmental facilities and community housing. The center set of projects affect the agricultural base calling for expanding agricultural production. The next two Master Proposals suggest that the total village economy needs

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PART THREE

new industrial development and local commerce expansion to increase the inflow and circulation of capital. The last two Master Proposals recommend that community life is enhanced through broader social engagement and village cooperation. Separate charts with descriptive phrases containing 112 sub-proposals add detail and clarity to the major categories of the Practical Proposals Chart. These proposals do not indicate what to do. They point to the arenas within which decisions must be made about corporate action. The specific tactical activities which describe what to do are the concern of the next phase.

PRACTICAL PROPOSALS CHART

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Plate 3

| I FUNCTIONAL EDUCATION PROPOSALS | | II LOCAL SERVICES PROPOSALS | | III AGRICULTURAL BASE | IV ECONOMIC EXPANSION PROPOSALS | | V COMMUNITY LIFE PROPOSALS | |
|--|---------------------------------------|--|---------------------------------------|---|--|------------------------------------|---------------------------------------|---|
| PRACTICAL TRAINING PROPOSAL A | VILLAGE EXTENSION PROPOSAL B | ENVIRONMENTAL FACILITIES PROPOSAL C | COMMUNITY HOUSING PROPOSAL D | EXPANDED PRODUCTION PROPOSAL E | INDUSTRIAL DEVELOPMENT PROPOSAL F | LOCAL COMMERCE PROPOSAL G | SOCIAL ENGAGEMENT PROPOSAL H | VILLAGE COOPERATION PROPOSAL I |
| CONTINUING EDUCATION 1 | EXTERNAL RELATIONS | TRANSPORT SYSTEMS 7 | RESIDENTIAL RENOVATION 11 | AGRICULTURAL IMPROVEMENTS 13 | BUILDING MATERIALS 17 | COTTAGE CRAFTS 19 | YOUTH ACTIVITIES 23 | COMMUNITY WORK 25 |
| FORMAL SCHOOLING 2 | | VILLAGE ELECTRICITY 8 | | FISH CULTIVATION 14 | | VILLAGE BUSINESSES 20 | | CELEBRATIVE EVENTS 26 |
| EARLY LEARNING 3 | VISION EXPANSION | COMMUNITY SANITATION 9 | DEMONSTRATION HOME 12 | LAND DEVELOPMENT 15 | SMALL INDUSTRIES 18 | COOPERATIVE MARKETING 21 | CARE NETWORK 24 | VILLAGE SQUARE 27 |
| VOCATIONAL SERVICES 4 | | PUBLIC HEALTH 10 | | EXPERIMENTAL FARM 16 | | CREDIT EXTENSION 22 | | SOCIAL ARTS 28 |

I

FUNCTIONAL EDUCATION PROPOSALS

The Functional Education Proposals are concerned with providing the residents of Bayad with practical tools for responding to the changes taking place in the village. There are two basic proposal arenas crucial to such training. The first indicates ways by which residents of all ages can improve their work performance in the community and upgrade their own earning capacity. The second involves the development of expanded relationships with structures and experiences outside the village. These proposals are directed toward undergirding and extending the existing formal schooling efforts to be more effective. They seek to upgrade various practical skills that are presently needed by and relevant to village life.

The Practical Training Proposal recommends structures that provide a broad range of educational experiences for people of all ages. The intent of this proposal is the development of responsible leadership across the community. The Continuing Education Project focuses on adult literacy, leadership development and functional skills in the midst of practical project actuation. This training will relate directly to actual experience. The Formal Schooling Project calls for activities designed to initiate a Preparatory School in Bayad for students in the surrounding area, and to supplement ongoing educational efforts. The Early Learning Project proposes the training of local staff, the operation of a preschool, the creation of child-care structures and the engagement of local parents in supporting activities. These efforts are intended as training in the midst of community service. The Vocational Training Project provides for occupational preparation in the fields of crafts, technical trades, business and industry. This proposal represents an effort to engage community leadership in an educational program that enables creative, requisite learning for the future.

A
PRACTICAL
TRAINING

B
VILLAGE
EXTENSION

A critical dimension of all training is the degree to which it broadens human images of the world. Two projects outlined by the Project residents deal with this concern. The External Relations Project proposes setting up a liaison between the formal educational structures and the local community for the purpose of support and information. Through such an arrangement, common educational concerns would be expressed and effective methods commonly employed. The Vision Expansion Project intends to broaden and illuminate global awareness through travel, student exchange opportunities and various forms of cultural enrichment. The thrust of this project is to provide broad educational experiences in order to undergird the entire Project.

II

LOCAL SERVICES PROPOSALS

The second proposal arena deals with the creation of necessary services that will allow community residents to participate more fully in the development of their village. There are two basic proposal arenas which stand as necessary components in strengthening the community's life. The first is concerned with providing basic environmental facilities. The second is concerned with housing the community adequately. The Environmental Facilities Proposal calls for developing transportation systems, electricity, water and sanitation, health and nutrition for the village. The Community Housing Proposal calls for providing a model of improved residential housing. It also points to the need for renovating the existing village homes. Essential to these proposals is the value of employing local resources, labor, materials and imaginative but locally relevant designs. They intend to catalyze the cooperative action of local, village and Government agencies in providing long-awaited services which will demonstrate local initiative.

C
ENVIRONMENTAL
FACILITIES

Villagers will be released to greater participation in community life. The Environmental Facilities Proposal provides for increased convenience, mobility and improved health. Expanded river and road Transportation Systems will aid in the transport of materials and people to needed destinations by improving roads and increasing vehicle access. By providing Village Electricity residents will have greater opportunity for participation in community and family affairs. This will also allow for the use of electrical appliances and other modern equipment and facilities. The addition of Water and Sanitation facilities will reduce the threat of contamination by ensuring and maintaining a pure multi-purpose water supply for

drinking, laundering and bathing. It will also establish a sanitary means of waste disposal. The Health and Nutrition Project will reduce sickness disability by providing the structures for preventive, corrective and ongoing health care as well as ensuring nutritional diets for all villagers. With the comprehensive expansion of essential services, the villagers of Bayad will acquire the resources for demonstrating the possibility of a fully-equipped community capable of caring for the life of each of its members.

D
COMMUNITY
HOUSING

The Community Housing Proposal allows the people of the village to realize adequate, healthful living accommodations. The Residence Renovation Project will allow for the systematic rehabilitation and upgrading of all existing homes. The Project will focus on providing animal shelters apart from living quarters. Construction of new homes will incorporate architectural designs appropriate to the environment. A comprehensive renovation plan will design and coordinate all future housing in the village. The Demonstration Home Project will provide a model of how new designs can be employed and will encourage villagers to begin to work on their own houses as well as provide education in more healthful home management. Improved community housing will transform many of the most foundational modes of living and allow for effective participation in the shaping of the new Bayad.

III

AGRICULTURAL BASE PROPOSALS

Agriculture has been an integral dimension of community livelihood along the Nile for centuries and has played a central role in shaping the life patterns of the Egyptian culture. This proposal arena calls for intensifying farming efforts for both food and income. The village residents can develop the agricultural base through modernized technology and the expansion of cultivation. By making the crops already under cultivation more productive, by creating a fish industry and by extending the arable land into the fertile desert basins such development can occur. This will begin by designating plots in the reclaimed area for experimentation with and demonstration of new techniques. Perhaps the most critical dimension of this proposal is the corporate approach to farming which will serve to fully develop the potential of agriculture in Bayad.

There are four projects which comprise the Expanded Production Proposal. These focus on the expansion of technology, the extension of land use patterns and the broadening of cultivated products. The Agricultural Improvements Project will focus primarily on

E
EXPANDED
PRODUCTION

augmenting the presently-used methods with new techniques. New cropping patterns, management procedures and marketing systems will serve to streamline and intensify the efforts of farm production. Fish Cultivation proposes to increase fish raising areas, improve farming methods and plan marketing procedures as well as new consumer outlets. The Land Development Project will double the present arable acreage through the use of irrigation and land management. This will allow for the intensification of corporate efforts and launch experimentation with new cash crops. The Experimental Farm Project will demonstrate new farming and processing techniques, effective animal husbandry and technology for improved crops.

IV

ECONOMIC EXPANSION PROPOSALS

The fourth proposal arena involves the development of a viable commercial and industrial base that will allow the dramatic expansion of the local economy. There are two proposals in this arena designed to provide immediate capital expansion, increased cash flow and local employment potential. The first calls for developing industry in the village by supplying Egypt's need for building materials which are present in the village's abundant supply of limestone and sandstone. It will also involve introducing a number of small industries as quickly as possible. The second proposal calls for improving the quality and enlarging the number of local commercial establishments. As commerce and industry expand, the village's reliance on its economic development will increase. Rural development in Bayad will symbolize the possibility for village development in all of Egypt.

F
INDUSTRIAL
DEVELOPMENT

Industrial growth is crucial to the expansion and development of local economy. It provides both locally usable goods and export commodities, bringing income into the village and producing jobs for local residents. The Industrial Development Proposal is designed to open new avenues of expanding the community's economic future through two projects. The Building Materials Project involves surveying the resources and setting up production of various types of products made from clay, limestone and sand for use in local construction. It also calls for training and marketing. The small Industries Project calls for a series of new ventures, including a food processing plant and components assembly operation. These are intended to signal economic possibility and to serve as training and employment opportunities for residents.

G
LOCAL
COMMERCE

The launching of new business ventures will serve to revitalize the foundations of the village. Four projects comprise the Local Commerce Proposal. The Cottage Crafts Project will use local raw materials and available skills to develop pottery-making and weaving as small business enterprises. It also calls for creating sales outlets. The Village Business Project includes the proposed initiation of a local bakery and market, along with supporting services. The creation of the Cooperative Marketing Project will support the effort to expand commercial services through coordinated volume purchasing and promotion schemes. The Credit Extension Project will ensure the availability of financial resources for creative business extension. A credit union will allow for the growth of local development capital.

V

COMMUNITY LIFE PROPOSALS

The fifth proposal arena involves the expansion of local care structures in order to maintain general well-being and provide methods for organizing village activities. The Community Life Proposals suggest the means whereby people living in the Project area can effectively shoulder the task of development together. This arena calls for developing cooperation and common engagement through two proposals. The first recommends scheduling activities to engage local youth in significant village projects. The second calls for cooperative work projects and community events which will enable the residents of Bayad to celebrate ongoing development efforts and see their relationship to the future of the nation and the world.

H
SOCIAL
ENGAGEMENT

The Social Engagement Proposal intends to demonstrate the possibility of full citizen engagement in community development. The Youth Activities Project will signify the creative role of village youth in rebuilding their community. It provides for training in leadership skills through corporate work, study, recreation and travel. The Care Network Project is supportive of the existing forms of social structures operating in the community. It calls for the delineation of neighborhood districts within which the decision-making process of all residents is discerned. This proposal suggests the importance of social care through social responsibility.

The Village Cooperation Proposal will demonstrate the possibility of corporate action in accomplishing tasks that strengthen community life and reinforce a common vision of the future. The Community Work Project recommends the creation of task forces through which residents can participate in common practical work. Special emphasis is recommended in the areas of construction, public works,

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landscaping and clean-up efforts. The Celebrative Events Project provides a regular rhythm of celebrations which mark special events, national holidays and community victories. The Village Square Project calls for the creation of a central node, a communications center, a community meeting space and a reception center for visitors. The Social Arts Project deals with extending community identity through utilization of cultural forms such as films, music and symbols.

I

VILLAGE COOPERATION

COMMUNITY LIFE PROGRAMS

The first proposal area involves the expansion of local area structures in order to maintain general well-being and provide methods for organizing village activities. The Community Life Programs suggest the means whereby people living in the project area can effectively shoulder the task of development together. This means calls for developing cooperation and common engagement through the project. The first recommendation regarding activities is to engage local youth in significant village projects. The second calls for cooperative work projects and community events which will enable the residents of Bayan to celebrate ongoing development efforts and see their relationship to the future of the region and the world.

The social engagement program intends to demonstrate the power of full citizen engagement in community development. The Youth & Women Project will identify the creative role of village youth in rebuilding their community. It provides for training in leadership skills through corporate work, study, recreation and travel. The Care Network Project is supportive of the existing focus on social structures operating in the community. It calls for the delineation of neighborhood clusters within which the decision-making process of all residents is discussed. This program suggests the importance of social care through social responsibility.

II SOCIAL ENGAGEMENT

The Village Cooperation Program will demonstrate the possibility of corporate action in accomplishing tasks that strengthen community life and reinforce a common vision of the future. The Community Work Project recommends the creation of task forces through which residents can participate in common practical work. Special emphasis is recommended in the areas of construction, public works,

I. FUNCTIONAL EDUCATION

A. Practical Training Proposal

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Plate 3A

| | | |
|--|--------------------------|--|
| 1. CONTINUING EDUCATION PROJECT | 1 General Literacy | expanding necessary learning skills |
| | 2 Mobile Library | extending external library resources |
| | 3 Functional Skills | increasing local practical skills |
| | 4 Leadership Development | developing village leadership prowess |
| 2. FORMAL SCHOOLING PROJECT | 5 Preparatory School | initiating post-primary schooling |
| | 6 Supplemental Program | undergirding local education efforts |
| | 7 Special Tutorials | maximizing basic skills potential |
| | 8 Upgraded Methods | enriching formal schooling effectiveness |
| 3. EARLY LEARNING PROJECT | 9 Teacher Training | creating equipped local faculty |
| | 10 Village Preschool | developing early learning potential |
| | 11 Child-care Structures | utilizing total educational options |
| | 12 Women's Service | forging creative women's roles |
| 4. VOCATIONAL SERVICES PROJECT | 13 Technical Training | providing practical vocational skills |
| | 14 Crafts Instruction | fostering local skilled artisans |
| | 15 Business Skills | developing local business prowess |
| | 16 Industrial Employment | providing skills development incentives |

I. FUNCTIONAL EDUCATION
 B. Village Extension Proposal

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Plate 3B

| | | |
|--|--------------------------|---|
| 5. EXTERNAL RELATIONS PROJECT | 17 Government Liaison | localizing state government contacts |
| | 18 Community Methods | enabling local leadership confidence |
| | 19 Parent-School Liaison | actualizing local curriculum consultation |
| | 20 Village Forum | developing effective village spokesmen |
| 6. VISION EXPANSION PROJECT | 21 Cultural Enrichment | utilizing available cultural resources |
| | 22 Regional Travel | expanding regional-local awareness |
| | 23 Student Exchange | developing youth vocational images |
| | 24 Global Ambassadors | establishing global project relationships |

II. LOCAL SERVICES

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C. Environmental Facilities Proposal

Plate 3C

| | | |
|--|------------------------|---|
| 7. TRANSPORT SYSTEMS PROJECT | 25 River Transport | improving cross river transportation |
| | 26 Road Surfacing | providing easy access routes |
| | 27 Community Vehicles | facilitating necessary village mobility |
| | 28 Emergency Service | ensuring vital services access |
| 8. VILLAGE ELECTRICITY PROJECT | 29 Village Lighting | providing public lights service |
| | 30 Residential Hookup | encouraging home electrical usage |
| | 31 Power Sources | assuring necessary electrical capacity |
| | 32 Village Management | providing village support/maintenance |
| 9. COMMUNITY SANITATION PROJECT | 33 Clean Water | assuring healthful water supplies |
| | 34 Waste Disposal | encouraging local physical well-being |
| | 35 Washing Locations | furnishing adequate cleansing facilities |
| | 36 Services Management | assuring effective service continuity |
| 10. PUBLIC HEALTH PROJECT | 37 Medical Care | providing preventive health services |
| | 38 Services Network | actualizing structured medical assistance |
| | 39 Community Oven | assuring local balanced diets |
| | 40 Hospital Equipment | developing local medical resources |

II. LOCAL SERVICES

D. Community Housing Proposal

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| | | |
|---|----------------------------|---|
| 11. RESIDENTIAL RENOVATION PROJECT | 41 Housing Rehabilitation | upgrading present housing accommodation |
| | 42 Animal Shelters | providing animal compound facilities |
| | 43 New Construction | providing new residential opportunities |
| | 44 Village Plan | designing village rehabilitation plan |
| 12. DEMONSTRATION HOME PROJECT | 45 Architectural Design | increasing available housing options |
| | 46 Materials Expansion | enlarging available building resources |
| | 47 Construction Technology | instituting effective building procedures |
| | 48 Family Living | demonstrating creative space use |

III. AGRICULTURAL BASE

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E. Expanded Production Proposal

Plate 3E

| | | |
|--|---------------------------|---|
| 13. AGRICULTURAL IMPROVEMENTS PROJECT | 49 Effective Management | demonstrating local farming expertise |
| | 50 Cash Crops | improving commercial crop production |
| | 51 Corporate Project | initiating new corporate efforts |
| | 52 Marketing Techniques | innovating effective commercial schemes |
| 14. FISH CULTIVATION PROJECT | 53 Pond Development | increasing potential fish-raising areas |
| | 54 Cultivation Techniques | teaching fish farming methods |
| | 55 Processing Technology | planning source-to-market processes |
| | 56 Market Development | finding new consumer outlets |
| 15. LAND DEVELOPMENT PROJECT | 57 Water Management | increasing effective water usage |
| | 58 Desert Reclamation | developing presently unusable land |
| | 59 Cooperative Ownership | building effective community ownership |
| | 60 Demonstration Plots | encouraging new farm technology |
| 16. EXPERIMENTAL FARM PROJECT | 61 Animal Production | demonstrating effective animal husbandry |
| | 62 Vegetable Crops | assuring proper dietary requirements |
| | 63 Agricultural Methods | introducing additional farming techniques |
| | 64 Produce Processing | maximizing local storage procedures |

IV. ECONOMIC EXPANSION

F. Industrial Development Proposal

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Plate 3F

| | | |
|---|-------------------------|--|
| 17. BUILDING MATERIALS PROJECT | 65 Materials Survey | exploiting local natural resources |
| | 66 Production Setup | starting effective production procedures |
| | 67 Labor Training | creating effective work forces |
| | 68 Sales Promotion | developing profitable market outlets |
| 18. SMALL INDUSTRIES PROJECT | 69 Food Processing | increasing farm income opportunities |
| | 70 Component Assembly | developing new capital potential |
| | 71 Skills Development | widening local manufacturing abilities |
| | 72 Industrial Promotion | securing local production contracts |

IV. ECONOMIC EXPANSION

G. Local Commerce Proposal

| | | |
|--|-------------------------|---|
| 19. COTTAGE CRAFTS PROJECT | 73 Market Development | opening product sales outlets |
| | 74 Pottery Making | utilizing local natural resources |
| | 75 Weaving Products | engaging village craft skills |
| | 76 Worker Enlistment | encouraging village-wide participation |
| 20. VILLAGE BUSINESSES PROJECT | 77 Local Market | expanding East-Bank product availability |
| | 78 Bayad Bakery | localizing staple manufacturing processes |
| | 79 Business Support | providing necessary ancillary services |
| | 80 Commercial Promotion | encouraging wider commercial development |
| 21. COOPERATIVE MARKETING PROJECT | 81 Bulk Buying | maximizing local pricing advantage |
| | 82 Products Pool | providing local products outlets |
| | 83 Marketing Plan | promoting strategic market planning |
| | 84 Village Association | supplying profits distribution structure |
| 22. CREDIT EXTENSION PROJECT | 85 Credit Union | supporting future product expansion |
| | 86 Credit Availability | securing adequate money sources |
| | 87 Business Loans | enabling local business development |
| | 88 Financial Liaison | assisting effective money management |

V. COMMUNITY LIFE
H. Social Engagement Proposal

| | | |
|--------------------------------|----------------------------|--|
| | 89 Work Corps | initiating significant youth engagement |
| 23. | 90 Leadership Development | developing corporate leadership roles |
| YOUTH ACTIVITIES PROJECT | 91 After-School Activities | establishing imaginal methods training |
| | 92 Athletic Programs | celebrating community life engagement |
| 24. | 93 Stake Creation | localizing community care networks |
| CARE NETWORK PROJECT | 94 Women's Service | intensifying established care roles |
| | 95 Village Assemblies | establishing consensus making structures |
| | 96 Welfare Survey | assuring local care requirements |

| | | |
|---|---------------------------|---|
| 25. COMMUNITY WORK PROJECT | 97 Construction Teams | mobilizing local construction talent |
| | 98 Village Beautification | recovering community space appreciation |
| | 99 Public Works | building basic community services |
| | 100 Village Task Forces | promoting community self-confidence |
| 26. CELEBRATIVE EVENTS PROJECT | 101 Heritage Recovery | strengthening local cultural identity |
| | 102 Work Day Celebrations | dramatizing corporate village victories |
| | 103 National Holidays | recovering intentional global relatedness |
| | 104 Community Identity | affirming destinal village role |
| 27. VILLAGE SQUARE PROJECT | 105 Communication Center | providing local communications means |
| | 106 Square Creation | creating unifying community nodes |
| | 107 Assembly Space | symbolizing new community participation |
| | 108 Reception Center | expanding local hospitality structures |
| 28. SOCIAL ARTS PROJECT | 109 Symbol Promotion | creating futuristic community symbols |
| | 110 Film Events | presenting global art forms |
| | 111 Village Chorus | developing community singing potential |
| | 112 Cultural Symbols | recreating basic ancient symbols |

PART FOUR

THE TACTICAL SYSTEMS

TACTICS

The fourth task of the Consult was to create the Tactical Systems. Tactics are the practical actions which become the concrete steps required to implement the proposals. The Tactical Systems describe and rationally organize the actions required to do the projects delineated in the Practical Proposals Chart. At this point the Operating Vision and the Underlying Contradictions become peripheral concerns except as they provide a broad context for designing the tactics. Social change occurs through tactical implementation rather than by simply grasping the vision or forging the proposals. The delineation of these systems, therefore, is perhaps the most crucial activity of the Consult.

PROCESS

In order to discern the Tactical Systems out of the many tactics required for each of the proposals, the Consult experienced a task similar to piecing together a puzzle. The completed picture provided practical instruction for implementing the total project. The consultants proceeded in this fourth step again in teams. Each team, according to its arena of expertise, was assigned a set of proposals from the Practical Proposals Chart (Plate 3). Working in small groups, each team created an inclusive list of the concrete actions required to effect its proposals. The team then organized its list of actions into basic tactics for each proposal. Finally all of the teams' work was gathered and organized to formulate the Tactical Systems illustrated by Plate 4.

RESULTS

The Tactical Systems Chart (Plate 4) is the result of this fourth phase of work. It is comprised of five tactical arenas, nine paratactics, 30 basic tactics and 209 subtactics. The basic tactics and subtactics indicate the specific tasks of the total project. They are listed and described in detail following Plate 4. The nine paratactics under which the basic tactics and subtactics are grouped point to the major aspects of the tactical arenas which are set in motion when the sets of basic tactics are implemented in the community. The five tactical arenas illustrated by Plates 4A - 4E hold the systems together and represent the overarching tasks to be accomplished. These inclusive groupings are described in the subsequent paragraphs. The master chart and detailed descriptions of each tactic then follow.

ARENA
A

Tactical Arena A, Expanding Fundamental Economic Base, consists of two paratactics and eight tactics. It is the intent of the tactical arena to integrate industrial and commercial ventures into a common thrust and to expand all forms of agricultural production. This is accomplished by introducing and utilizing modern agricultural technology to enable greater output of products into the economy. In addition, new and revitalized local industry will be developed in order to supply local and export markets. Tactical Arena A is crucial to the economic expansion of the village and will help to foster a spirit of self-sustenance and unity.

ARENA
B

Tactical Arena B, Developing Inclusive Social Forms, is comprised of two paratactics and six basic tactics. Tactics within this arena will increase the self-consciousness of the village's relationship to itself and to the world. The basic understanding implied in this arena is that the critical factor in the comprehensive development of any village is sustaining the motivation to fully engage in the common thrust. This arena is directed towards developing an awareness of the common concerns shared by the whole community and a capability for effective corporate action. The expansion of global awareness, the dissemination of relevant information and the promotion of community identity will be facilitated by the organization of the village into effective care networks to enable full participation in the life of the community.

ARENA
C

Tactical Arena C, Shaping Basic Village Structures, is divided into two paratactics and eight basic tactics. The aim of the tactical arena is to create those village structures that are urgently needed to restore human vitality and energy at both the physical and social levels. These tactics deal directly with stimulating village life by immediate action to provide adequate public facilities and basic services for all the residents. This is accomplished through the establishment of physical space within the community that can have deep significance for each inhabitant. Concurrent to this is the establishment of village services which allow for increased participation resulting from improved health and modern equipment.

ARENA
D

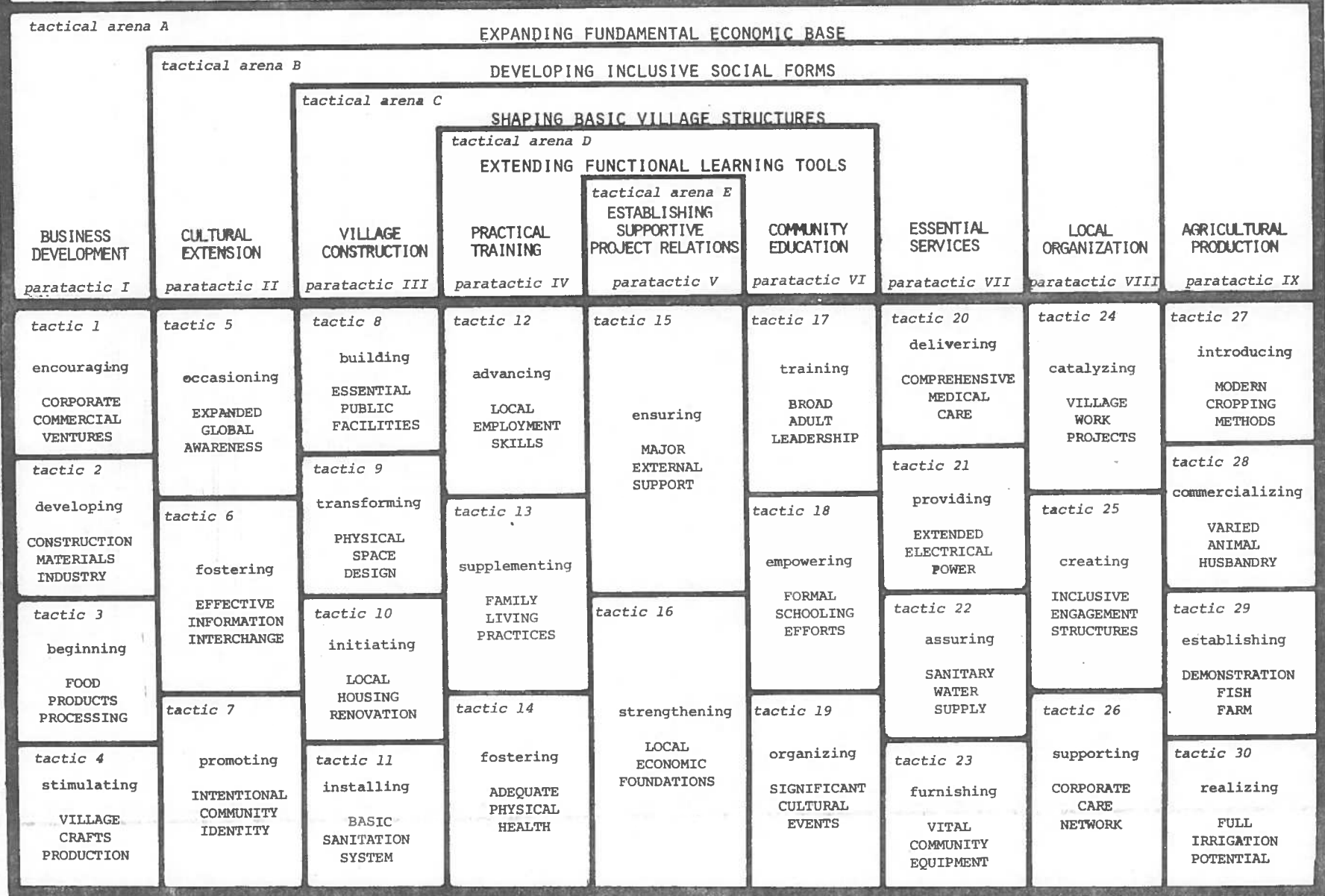
Tactical Arena D, Extending Functional Learning Tools, consists of two paratactics and six tactics. It is the intent of this tactical arena to create those programs that provide skills and knowledge which allow the inhabitants of Bayad to enhance their well-being and to engage effectively in care for the community. This will be accomplished through training in a broad spectrum of skills that will support enlarged incomes, domestic abilities and physical well-being. In addition, special efforts will be made to augment present formal schooling and equip emerging leadership to deal effectively with the various challenges facing the community. Cultural events will be organized which rehearse the greatness of the village as it stands prepared to venture into the future.

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ARENA
E

Tactical Arena E, Establishing Supportive Project Relations has one paratactic and two basic tactics. The intent of this tactical arena is to establish those relationships which can assist the project in bolstering economic foundations and provide for the exchange of information which strengthens the emerging economic stability. The acceleration of commercial activity within the community is central to this arena as it serves to undergird all aspects of village development.

TACTICAL SYSTEMS CHART



TACTICAL ARENA A: Expanding Fundamental Economic Base

Paratactic I: Business Development

In order to increase and diversify village income, new commercial forms will be created and existing small business operations will be expanded and intensified. A full range of corporate commercial services and marketing ventures will be instituted to expand individual and corporate purchasing power. These efforts will also streamline and develop the market potential of locally produced goods and services. A full blown construction materials industry will serve to exploit the local natural resources of sand, clay and limestone, thereby providing employment possibilities and bringing significant income into the village. Processing locally produced agricultural products will reduce shipping costs, generate employment and extend the market potential of such products. Ancient crafts will be reinstated and revitalized in order to make village products available to the global market.

Tactic 1: Encouraging Corporate Commercial Ventures

Subtactics In order to intensify community income, make necessary goods available, and provide employment for village residents corporate commercial ventures will be encouraged.

- 1 A produce market in Beni Suef will be established to create an outlet for Bayad products in a tastefully
- 2 decorated space under a single economic structure. A commodity outlet for local goods will also be set up as
- 3 a means of securing top markets and eliminating the financial drain presently caused by transportation and storage costs. The Bayad Food Bazaar will be created
- 4 as a corporate enterprise providing local goods and quality, low cost food stuffs to village residents and consumers in the East Bank area. This will provide a
- 5 means of turning money over within the community as well as establishing Bayad as a commercial center. A commercial association will be started by local businessmen
- 6 to promote common economic ventures, responsible business practices, coordinated development and corporate use and promotion of business services. A credit union will be started to provide individuals with a source of operating capital to make individual home improvements and intensify production and marketing efforts. Village residents will be able to purchase needed goods and supplies from a cooperative store which will provide a wide range of products to Bayad residents.

Tactic 2: Developing Construction Materials Industry

Subtactics Local resources favor the formation of a building materials industry to provide bricks, stone and cement for

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8 village construction and for sale. A sizable clay source
9 will be secured for purposes of extensive brick manufac-
10 turing. A locally available brick press will be sought
11 to begin production. A storage yard will be constructed
12 to secure stored bricks held for sale. Trial tests will
13 be run on unfired bricks to see if they will hold up
14 under actual use. A local kiln will allow baking of new
products found to be workable. A safety program will be
instituted at the quarry to prevent workers' accidents.
Quality stone products such as limestone block, brick
and graded gravel will be produced to increase income
to the village. Cement manufacturing will be researched
as a possible new industry.

Tactic 3: Beginning Food Products Processing

Subtactics In order to market the local farm produce of Bayad to a
15 broad range of consumers, agricultural products processing
16 will be initiated. A flour mill will be constructed for
17 grinding wheat, millet and corn grain to supply local
18 domestic and commercial baking needs. Sesame products
19 including oil, candy and paste will be made. Basic pro-
20 cessing equipment and facilities will be secured as
21 viable product lines develop. Initially this would in-
22 clude an oil press, multipurpose sheds, packaging units
and drying racks. Prepared foods such as soy products,
date candy, peanut butter and guava jelly will be ex-
plored. Quality eggs from the poultry farm will be candled,
graded and crated. Cheese varieties will be processed.
Packaged honey supplied by the apiary will be prepared.
Local fish will be slated, dried and barreled.

Tactic 4: Stimulating Village Crafts Industry

Subtactics A revival of the craft occupations which have provided
23 sustenance to villages in the past and which use local
24 resources can significantly contribute to Bayad's
25 business development. The potter's trade will be made
26 possible by securing a source of suitable clay. Dis-
27 tinctive Egyptian designs, based on ancient models, will
28 be created with the assistance of a design consultant.
29 A master craftsman will be engaged to instruct selected
30 apprentices in the trade. A studio workshop will be
31 built as a center for training and production. Craft
tools will be purchased. Reed mats will be woven accor-
ding to market requirements. Loom crafts including rugs,
tapestries and blankets will be produced. Crocheted
goods will be expanded beyond the present woolen caps to
vests and other items. Sales contracts will be sought in
order to absorb the output of the new crafts industry.

TACTICAL ARENA B: Developing Inclusive Social Forms

Paratactic II: Cultural Extension

In order to release motivity and engagement in the task of development practical means will be created to extend cultural relationships externally and internally. Extending contact with the world at large will expand the villagers' awareness of the significance of their own community as well as their functional grasp of the globe. Information interchange systems will inform decision making and expand program participation. The display of essential symbols will provide an effective means of promoting the village's identity and role in the global renewal of human community.

Tactic 5: Occasioning Expanded Global Awareness

Subtactics A series of activities will be organized to allow Bayad residents to share their story and achievements with the world and deepen their awareness of and contact with ways of life, cultures and situations other than their own. Organized trips throughout Egypt and visits to other places in the world will offer direct contact with the globe. Student exchange opportunities will be created as an integral part of the village educational effort. Audio-visual materials will be used to present information on other parts of the country, continent and the world. Visits to the library at Beni Suef will be organized for children and adults. A public telephone will be installed in the plaza area. A magazine and newspaper rack will be established at a central location to make comprehensive news reporting and current articles available.

Tactic 6: Fostering Effective Information Interchange

Subtactics Information dissemination systems will be created to provide the community with the knowledge necessary for full program development and implementation. Regular program papers will be printed and circulated to make models and data developed within particular programs available. This would include information such as crop demands, dietary data and job opportunities. Quarterly reporting of all accomplishments and projections will be instituted. Bulletin boards will be installed in the village square and all community buildings and nodes. A reading room will be created to contain books on all structures and programs. A mobile loudspeaker system will be acquired to communicate information to the residents regarding common events and workdays. Network representatives from each geographical subdivision of the community will

be recruited. This corps will maintain the flow of information to and from the community, thereby allowing every person, regardless of literacy level, to have access to important decisions and planning processes.

Tactic 7: Promoting Intentional Community Identity

Subtactics The promotion of Bayad's image as a pilot human community will release the motivity and engagement of the local people. Welcome signs will be placed at each end of the village along the Cairo Road. The village symbol will be created and displayed in the village square facing the main road. Residence plaques identifying the family name and house number will be designed and installed. Street signs will be placed at each intersection. Public art forms such as murals will be designed and located appropriately. El Bayad labels will be created for all products marketed outside the community as a mark of excellence and identity.

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TACTICAL ARENA C: Shaping Basic Village Structures

Paratactic III: Village Construction

In order that the physical environment might adequately reflect the community's future vision, a comprehensive construction program will be undertaken. A series of public facilities will be constructed in order to allow for the common functions of the community to be carried out. Community gathering places will be transformed to enhance the natural beauty of the village's design. A systematic program of housing renovation will be undertaken to meet the new vision developed during the Consult. Sanitary water and waste handling facilities will be constructed to provide front line preventive health care.

Tactic 8: Building Essential Public Facilities

Subtactics As the El Bayad project moves forward, public facilities will be needed to assure the village of common places for work and community activities. An outdoor market with tent covering, stalls and benches will be established to include shelters for the marketing of produce raised on the farms. A service center will be constructed to house a market cooperative, a tea house and a public telephone. A public meeting place large enough to accomodate major gatherings of the community will be located. With an increase of business between Bayad and other cities the docking facility will be improved to accomodate an increasing number of passengers.

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- 53 A building for the village store will be provided. To
support increased farming and husbandry activities a
54 refrigerated storage unit will be built. It will be
equipped with a walk-in freezer compartment for long
55 term storage and a walk-in cooler compartment to pre-
serve fresh produce crops.

Tactic 9: Transforming Physical Space Design

- Subtactics The intentional designing of village space is essential
to providing a human environment. School grounds will
be graded and beautified with shrubs to provide child-
56 ren with pleasant, safe play areas. Community nodes
will be established to provide neighborhood
57 gathering places for meetings and social exchange. An
overall village plan will be designed to include all
59 present physical features and to indicate projected
buildings, shrubs, trees and flower plantings. The
60 village square will be renovated and beautified to pro-
vide space for community gatherings and recreation.
61 This will involve grading and paving the open area
immediately west of the village between the primary
62 school and the east bank road. Village streets, pre-
sently composed of limestone will be leveled. All
other roads and trails will be paved with a limestone
and mud mixture to provide hard and easily maintained
surfaces. Green plantings of trees and shrubbery will
be set in at several locations across the village.

Tactic 10: Initiating Local Housing Renovation

- Subtactics In order to provide adequate family living units,
housing rehabilitation will be initiated. Appropriate
plans and designs will be prepared. These will combine
the wisdom of the residents with the skill and experi-
63 ence of an architect. A housing survey will be conducted
to determine the extent of renovation needed. The use
of local materials such as clay, sand, lime, sandy loam
64 and various reeds and grasses will be encouraged in the
basic designs of wall, roof and floor systems suitable
to the local climate. Then cement floors using a mini-
65 mum of imported materials will be installed over the
existing mud floors. These floors will be of two-course
construction involving the covering of a one-inch thick
66 base course of weak sand cement mixture with a thinner
and stronger surface of the same material. Window shut-
ters and screens will be installed to eliminate the annoy-
67 ance of bats and insects. In addition, other intensive
renovation schemes will be developed for roofs, interior
and exterior wall finishes and ventilation. These

could include experimentation with high domed roofs for airy, bright, cool rooms, or the development of an improved flat roof design. A model home will be built to demonstrate the desirability and feasibility of the new designs, techniques and materials. The home will include an improved cooking area, sanitation features and separate animal quarters and will serve as the practical laboratory for many of the domestic skills programs.

Tactic 11: Installing Basic Sanitation System

Subtactics By installing a basic sanitation system overall village well-being will be ensured. A series of 12 public toilets will be installed, each providing four separate units for men and women. The units will contain a washstand, an automatic water flush, and water seal. Six public showers, also with separate units, will be installed throughout the village. Each separate unit will include four showers. Laundry and water facilities will be provided at the shower locations. Each of the locations will have a covered sewage storage tank capable of storing the total accumulation of liquid discharge for a period of 48 to 96 hours. Six composting tanks will be installed throughout the fields for the decomposition and stabilization of organic wastes for land development. A 1,000 gallon capacity tank truck with vacuum pump will be used to drain the units and the composting tanks for field disposal. Two-compartment covered rubbish bins will be installed at 12 locations throughout the community to receive the organic and inorganic garbage regularly collected. Animal pens will be constructed at the east end of the village. Manure will be hauled in the same manner to the composting tanks.

TACTICAL ARENA D: Extending Functional Learning Tools

Paratactic IV: Practical Training

In order to equip Bayad residents to practically care for and sustain their own village, a series of training programs will be created. To allow for the village's increased participation in the existing job market, a series of programs designed to train residents in skills necessary to the futuristic operation of the community will be developed. Women will be trained in new skills to enable improved domestic health and economics. Fundamental well-being will be fostered through practical training in hygiene and nutrition.

Tactic 12: Advancing Local Employment Skills

Subtactics The upgrading of local employment skills will release available human resources in the work of community development at the same time it increases the income of the village. Local specialists will provide on-the-job training in technical fields in order to

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train community people in the fields of basic sanitation, mechanics, electrical installation, construction and water systems. A maintenance program will be developed to assure the operation of community vehicles and to instruct men and youth in the repair and up-keep of engines. A local resident technician will be trained to maintain the generators and electrical equipment in the village. Construction trades classes will be taught by local experts and outside consultants. These will include carpentry, heavy construction and utilities installation. A course in business techniques will be provided so that men, women and youth can learn the skills necessary for accounting, bookkeeping and business management.

Tactic 13: Supplementing Family Living Practices

Subtactics The broad development of family living skills will allow the families of Bayad to become generally more self-sustaining. Classes in sewing will be taught to women and girls. These will include training in fabric choice, pattern making, design, stitchery and machine sewing. Skills learned in sewing classes could become a source of new monies for families in the community. To encourage interested residents to participate in the local crafts industries, handicrafts demonstrations will be held. These will include weaving, pottery making, crocheting, thread spinning, tapestry and rug making. A foods laboratory will be set up in the model home in which women and girls will explore new methods of preparing tasteful, nourishing and attractive meals. Menu planning workshops will be held to provide knowledge of basic food group values, practice in building each food group into the daily diet, and application of traditional Egyptian food patterns to village nutrition needs. Household budgeting instruction will be offered to provide training in spending patterns, efficient marketing practices and accounting procedures.

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Tactic 14: Fostering Adequate Physical Health

Subtactics In order to release the potential vitality of the people

- 88 of Bayad and thus enable the creative participation of every person in the human development of the village, fundamental physical well-being will be fostered. A comprehensive health education effort will be initiated
- 89 to broaden the villagers' practical grasp of the relationship between good health, nutrition and regular personal care. At the model home, regular demonstration
- 90 of hygienic practices in the areas of sanitation, food storage and domestic health will be demonstrated. Dietary supplements consisting of a mixture of wheat and soya
- 91 or peanut oil will be received in Bayad twice monthly. These will be distributed on the basis of need beginning with pregnant women, lactating mothers and young children.
- 92 Child care will be offered to demonstrate the possibilities of relevant methods of infant and child development. School lunches comprised of a balanced variety of essential proteins and vitamins will be provided for school
- 93 children in order to correct dietary deficiencies. Instruction in family planning methods will be made available.

TACTICAL ARENA E: Establishing Supportive Project Relations

Paratactic V: Project Relations

In order to insure that the Project is adequately undergirded, it will be necessary both to systematically organize external support and to strengthen local economic operations. This effort will require training local people to participate in the development of funding and support schemes which involve all sectors of the broad economy at large. At the same time, by maximizing benefits of local product sales and effectively using the corporate economic power already available, the financial base of the village will be strengthened.

Tactic 15: Ensuring Major External Support

Subtactics In order to ensure the rapid initiation and continuous acceleration of the Bayad Human Development Project

94 major external support will be needed. A team of community ambassadors will be selected and trained to

95 maintain external relationships and to serve as hosts for visitors in the village. An overall funding plan

96 will be developed in order to support the total project budget. The services of skilled consultants will be

97 sought to provide practical training and initiate specific programs. The assistance of governmental bodies

98 will be solicited to make resources, services, equipment and legal arrangements readily available to the project. Funds and assistance will also be sought from the private sector including businesses, agencies, religious

- 99 bodies and private foundations. In-kind goods and services will be encouraged to broaden the availability of
100 necessary resources. Concerned individuals will be
101 encouraged to participate in the project through the
102 donation of their resources. Credit will be sought.
103 Long and short term loans will be secured from financial
institutions in order to launch particular programs.
Procedures for fiscal accountability will be established
to allow for regular auditing and ongoing financial evaluation of the project.

Tactic 16: Strengthening Local Economic Foundations

- Subtactics** It will be necessary to initiate activities that provide the foundations of a viable local economy in order to undergird the total development effort. An information access and data holding system will be created, allowing economic ventures to be launched on an informed basis. Market development will be done in Beni Suef, Cairo, across and beyond Egypt on an ongoing basis as a means of securing the most profitable outlet for locally produced goods. Volume purchasing will be initiated in order to make needed goods available at reduced costs. A comprehensive analysis of consumer needs will be made to project local production requirements. The promotion of specialty products will be systematized to secure markets for crafts, pottery, processed food and commissioned artistic works. Relationships with external markets will be established in order to broaden the flow of goods, ensure access to financial credit and gain the consultation of business and management expertise.
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TACTICAL ARENA D: Extending Functional Learning Tools

Paratactic VI: Community Education

In order to insure the continuing development and emergence of village leadership capable of directing the project, it will be necessary to build support systems for existing formal schooling efforts and create additional opportunities for ongoing training. New structures will be created to provide community leadership with effective social methods of corporate planning, task organization and timelining. Work in basic skills, particularly in the arena of literacy will also be provided as part of the functional skills required for the effective engagement in the community and the world. Regular teacher training sessions, supplementary summer courses and a full range of remedial structures for students will be created in order to support existing formal schooling efforts. Finally, by enlarging the total community's options for cultural activities all people will be able to grasp the full depth and breadth of the world and the historical times in which they live.

Tactic 17: Training Broad Adult Leadership

- Subtactics
- 110 The development of broad adult leadership is required in Bayad to allow the task of project direction to be assumed by the local residents as soon as possible. Training in social methods will be provided through the community guild structures to equip adults with the practical tools of community development.
- 111 A literacy program will be organized. In addition to classes in reading and writing skills, broad basic education in functional mathematics, local and national history and global geography will be taught through the daily activities of the project programs. Management apprentices will be recruited to be trained as the staff of the reading room, service center and cooperative store.
- 112 A community curriculum will be designed whereby a total educational plan of practical and formal training may be made available for all residents.
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Tactic 18: Empowering Formal Schooling Efforts

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- 115 In order to maximize the full potential of Bayad's formal educational structures, a variety of supplemental activities will be undertaken. A preparatory class will be established in connection with the Primary School to provide students with a structure to supplement existing formal academic programs. A curriculum and structure for early learning will be developed to engage children under six years of age in intentional education. Regular teachers' meetings will be held to develop curriculum and the corporate effectivity of the faculty. Summer courses will be encouraged for teachers to provide methods training and pedagogical skills. Classroom decor will be created to illustrate various aspects of the educational program and to release motivity. Orientation sessions for new teachers will be held to introduce them to the project and their unique role within it. A program of tutoring will be made available to provide individual help to students who have unique educational needs.
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Tactic 19: Organizing Significant Cultural Events

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- 122 In order to accasion the significant engagement of all age groups, cultural events will be organized. A film series will be scheduled on a regular basis through which practical instruction can occur and global awareness can be fostered. Audio-visual equipment, including a 16 mm. movie projector, portable screen, and a combination film and slide projector will be procured for
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- 124 local education programs and community group events. Community singing groups will be formed to provide musical entertainment at celebrative occasions. Their repertoire of songs, drawn from Egyptian culture, will become
- 125 part of the heritage recovery effort of the community. Guest performers, available through the Beni Suef Cultural Center will be invited to make special presentations. Community games days will be held for the young
- 126 men and boys to compete in team sports. Heritage events illuminating the past greatness of Egypt and Bayad's
- 127 future will be planned by the community for local and national holidays. An open day series will be initiated
- 128 whereby families can participate in the planning and implementation of special musical and dramatic programs.

TACTICAL ARENA C: Shaping Basic Village Structures

Paratactic VII: Essential Services

In order to provide the full human environment for effective community reformulation, intensive efforts will be made to develop essential services. The Bayad clinic will be refurbished and a full range of medical care programs will be initiated to insure the health and vitality of the village. Comprehensive electrical power will be provided for village lighting and the development of light industry. A sanitary domestic water supply system will be installed to assure the village a plentiful amount of potable water. Basic community equipment will be secured to support the program efforts.

Tactic 20: Delivering Comprehensive Medical Care

- Subtactics The delivery of extended health care to all the residents of Bayad is crucial to the broad release of human vitality and creativity in socio-economic development. Bilharziasis treatment will commence immediately to provide affected citizens with appropriate medication. Field
- 129 toilets will be constructed to encourage the hygienic disposal of excreta as a means of breaking the life cycle of bilharzia. Snail eradication measures will be instigated through application of snail poisons and herbicides
- 130 to the canal area and by working through the feasibility of eventually lining the canal with stone. A massive diagnosis of the incidence of disease will be undertaken
- 131 with appropriate follow-up and rescreening. Preventive immunization will be initiated to inoculate children with poliomyelitis, smallpox, triple antigen, BCG and
- 132 measles vaccines. Medical records will be established at the health center whereby each family member's medical
- 133 history can be documented and updated for adequate ongoing care. A mother-child clinic offering pre and post-natal
- 134 care will be held on a weekly basis at the Bayad health

- 135 center. Vitamin supplements will be distributed to
136 combat diet deficiencies. Pharmaceutical supplies,
137 including first aid equipment, antiseptics, and anti-
138 biotics will be stocked. Essential equipment, including
139 a refrigerator, storage cabinets, a sterilizer and
140 filing cabinet will be procured. A health liaison, com-
prised of local residents will be formed to work with
clinic staff in representing community needs and work-
ing with the Beni Suef hospital. A full-time nurse will
be employed to provide regular service and to work with
community health volunteers.

Tactic 21: Providing Extended Electrical Power

- Subtactics Electrical power is necessary for domestic and indus-
trial use in Bayad. The electric system design will
141 be initiated in consultation with the government to
ensure future compatability in connecting with the
national electric grid. The village of Shaik Ali,
142 located approximately 1 kilometer south of Bayad, is
also to be included in the electrical plan. A 100
KVA diesel engine driven generator will be installed
as the initial power source. An underwater cable will
later replace it by bringing power from across the Nile.
143 The distribution cabinet will be the same for either
source. A distribution network will deliver power to
the consumers in the private, public, industrial and
agricultural sectors. Public lighting in the village
144 square and along the streets will be completed in the
early phases of the program. These lights will con-
sist of 100 watt fixtures mounted on distribution poles.
A village electric commission will be formed to coordin-
145 ate with the government corporation, marshall the mater-
ials and equipment, coordinate the installation work
and develop the needed financial arrangements. An
electricity crew drawn from local residents will be
146 organized to assist with the unskilled aspects of the
initial installation. This will provide direct and in-
direct training opportunities in the tasks of installing
the generator, setting in poles, stringing the wire,
147 and installing street lighting according to the design
called for by the village plan. This same force with
further training will later take on the responsibility
of maintaining the system.

Tactic 22: Assuring Sanitary Water Supply

- Subtactics A sanitary water system capable of handling 100,000
gallons per day is essential to the life of the village.

148 Bore sites will be identified and wells drilled. Ini-
149 tially this will involve drilling three 10-inch diameter
150 bores near the canal. Water test bores will be drilled
151 to determine well sites closer to the village. Dis-
152 tribution points will be identified. These will in-
153 clude simple water supply points and more substantial
154 points for laundry, shower and toilet facilities.
155 The delivery system will be designed to provide for
156 initial phase use as well as additional hookups. Tur-
157 bine pumps adequate to delivering the required capacity
will be installed. A reserve pump will be provided as
insurance against system block in the event of break-
down. A pump house will be built to house the equip-
ment. Installation materials including 3 inch pipe,
taps and facility parts will be procured. Groundwork
excavation of water pipe routes, pump foundations,
drainage pits and distribution points foundations will
be undertaken. An elevated water tower equipped with
a float switch and treatment house will be built. A
local sanitarian will be hired to maintain equipment,
test water for chemicals, and collect samples weekly
for laboratory testing to determine potability. Im-
proved water storage vessels equipped with taps will
be provided for home use.

Tactic 23: Furnishing Vital Community Equipment

Subtactics To carry out the development of Bayad effectively, basic
vehicles and support machines are needed. A motorboat
adequate for eight persons will be put into service as
an emergency ambulance and visitor host conveyance,
thereby facilitating rapid transport to Beni Suef. A
village minibus will provide rapid transport of people
around the village and to and from the ferry landing.
It will also be available for frequent Bayad to Cairo
trips. A flatbed truck will be procured for the trans-
port of produce and supplies between Bayad, Beni Suef
and Cairo and to allow for materials movement throughout
the village. A small pickup truck will be procured for
use as a repair vehicle and for transport of seeds, fer-
tilizer, chemicals and industrial materials. A 20'
by 40' repair shed with a hard surfaced floor will be
constructed to house vehicles and to serve as a repair
facility. A secure locker for tools, petrol and repair
parts will be constructed within the shed. Needed
construction equipment such as a front-end loader,
cement mixer, trailer, arc welder, acetylene torch and
leveler blade will be obtained for community use. A
set of basic tools will be secured for carpentry, con-
struction, electrical, plumbing and automotive mainten-
ance and repair.

TACTICAL ARENA B: Developing Inclusive Social Forms

Paratactic VIII: Local Organization

In order to assure the effective mobilization and organization of the community in the total development effort new forms of empowering the inclusive engagement of every human being will be created. Practical work will be done to catalyze major forces around both short term and long term efforts to recreate the physical environment. Ongoing forms such as guilds will be created to accomplish the work of the programs. A village care network will be organized geographically to engage and care for every citizen.

Tactic 24: Catalyzing Village Work Projects

Subtactics Enabling both the ongoing and short term physical efforts of development, community work projects will be established. A yearly rhythm will be created on the basis of the projected major tasks called for by the project plan. This will be reviewed and updated on a regular basis. A public service corps comprised of local residents will be employed to do tasks requiring specialized abilities. These men and women will be recruited through the guild network and trained on the job in work arenas such as construction, sanitation and maintenance. A volunteer work force drawn from across the community will be initiated to serve in implementing small scale short term projects. Weekly workdays will be arranged to involve the work force in the supportive tasks of the community's physical care. One-day miracles will be planned to demonstrate the power of corporate engagement in common work efforts.

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Tactic 25: Creating Inclusive Engagement Structures

Subtactics In order to unify social and economic development, local engagement forms will be structured. Community guilds which comprehensively reflect all project arenas and inclusively represent the composition of the village population, will be formed to provide the practical direction, assignment and implementation of actuation tasks. Planning meetings will be held through which the local residents can rehearse the vision of the development effort and decide the implementation procedures on a daily, weekly and quarterly basis. Task commissions, comprised of local citizens, auxiliary and outside consultants, will be called into being to handle the designs and implementation of special efforts. A quarterly evaluation will take place in which the accomplishments of the project will be assessed and

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new directions for future action can be determined.

Tactic 26: Supporting Corporate Care Network

- Subtactics** In order to assure the delivery of available services to all residents, the basic village care network will be strengthened. A program of systematic visitation will be undertaken to provide an ongoing link between every village family and available services. A village grid will be designed outlining the manageable units of geography within which neighborhood care can occur. A service directory will be prepared in both pictorial and prose forms to fully communicate critical information to all residents. Literacy tutors, drawn from the local youth and adults will be enlisted to teach community adults and children reading and writing on a part time basis. Significant celebrations will be held on the neighborhood level to provide occasions for interchange and recreation. A community calendar will be designed and displayed in public areas to dramatize the common time design of the whole village.
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TACTICAL ARENA A: Expanding Fundamental Economic Base

Paratactic IX: Agricultural Production

In order to provide an adequate nutritious diet for Bayad residents and exploit the income producing potential of the village's agricultural enterprises, major work in improved methods, crop diversification, animal husbandry and land expansion must go on. Modern cropping involving the best wisdom available in crop technology will be introduced. Fish farming will be initiated to correct deficiencies in protein. New methods in animal husbandry will be introduced to empower the commercial potential of varied livestock efforts. Full land use will be achieved by developing the irrigation potential of the area.

Tactic 27: Introducing Modern Cropping Methods

- Subtactics** The key to progress beyond subsistence farming is the introduction of new and applicable technology. Superior seeds of adapted varieties available through government channels will be procured to provide increased yields from presently grown crops of maize and sorghum. New cash crops such as soybeans now promoted by the government will be introduced for experimentation and subsequent expansion for human and animal consumption as well as cash markets. Nutritional produce, such as fruits and vegetable crops of high nutritional value
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- 184 and market potential in Beni Suef and Cairo will be grown on the experimental farm. This effort will also include sugar cane for syrup and sugar processing. Efforts will be made to coordinate crop planting dates and to encourage row planting and furrow irrigation in order to make mechanical planting and cultivation possible. A combination of mechanical and chemical means will be used to control weeds and fertilizer.
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- 186 Agricultural machinery will be procured including two community tractors with accompanying plows, rotivator, row weeders, small grain seeder and large seed planter; a land leveler; trailers each with a capacity of three tons, a 500 gallon water tank, engine powered thresher and a lifting bucket loader. Deep plowing with the use of a disk or moldboard plow will be explored to show the possibility of crop residue incorporation.
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Tactic 28: Commercializing Varied Animal Husbandry

- Subtactics By commercializing village livestock production sources of protein foods and income will be increased. Cattle will be developed with artificial insemination from high grade bulls. Food supplements including government subsidized cotton seed cake and local protein feeds will be used to cut costs of growing cattle to slaughter weights. The function of cattle will shift from draft uses to meat and milk production with the development of mechanized cultivation methods. Disease control will center on parasite suppression and the elimination of debilitating diseases. This will be done through the application of proper medicines and in close cooperation with the government veterinarian located in the village. Poultry production, including chicken broilers and layers, ducks, turkeys and pigeons will be undertaken in both small and commercial sized flocks. Coops will be built locally and located near but outside the village homes. Experimental rabbit farming will begin in small hutches, primarily tended by youth. Field weeds and grasses supplemented with a small amount of alfalfa and grain will be used as rabbit feed. A demonstration honey bee project will provide food variety and a source of natural energy foods. One hive per feddan is estimated to produce 20 kilograms of honey per annum. Silkworm production will be initiated with a simple system of trays, purchased eggs and mulberry plantings.
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Tactic 29: Establishing Demonstration Fish Farm

- Subtactics Additional protein will be supplied to the people of Bayad through the new concept of fish farming. The

- 195 tilapia, a fish found world-wide, is native to the Nile
and will be used as the basis of the new enterprise.
196 These fish grow and reproduce rapidly on no feed other
than organic waste. A series of breeding ponds at
197 descending levels will provide the basic physical plant
for the farm. Covering a total area of two feddans,
198 the ponds will produce enough mature fish to provide
each villager with a fish meal three times a week.
199 Weir gates will be installed in the irrigation canal
to maintain necessary water levels. Screened barriers
will be employed to fit out the irrigation canals for
200 additional breeding areas. A regularized collection
program will bring organic waste feed from the village
to the ponds. A pilot pool, located in an existing
pond along the highway will demonstrate the value of
fish farming by stocking the pond with tilapia from
the river and observing their growth.

Tactic 30: Realizing Full Irrigation Potential

- Subtactics
- 201 By realizing full irrigation potential, desert land
can be reclaimed for cultivation. The existing major
irrigation canal providing water from the Bayad
pumping station will be surveyed, cleaned, hand dredged
and enlarged to increase the delivered quantity of
irrigation water to an extended command area. A training
202 program focused on a series of practical, infield
demonstrations will be set up to show the farmers how
to conserve water by using a syphon delivery system
and shifting from the present practice of flood irri-
204 gation to furrow irrigation. The delivery of water
to the various fields will be systematically regulated
according to specific crop requirements. The amount
of water application, length of time per application and
205 interval between water applications will all be carefully
checked and regulated. A thorough identification of
desert land east of the Bayad road will be carried out
clearly delineating privately owned land and government
206 owned land so that the perimeter of the desert reclama-
tion area can be determined and procedures for securing
that part of the government owned land can be initiated.
For the lowland desert area, immediately east and adja-
207 cent to the Bayad road, an irrigation network will be
set up incorporating a low-head, high capacity pump
that will pump water from the existing major canal through
a pipe running to the command area. For the area further
208 east of the road and east-northeast of Bayad, where
the elevation is higher, a pump set with a high head
and high capacity will be installed to pump water from
the major canal through a delivery pipe running to the
higher command area. On the island, west of Bayad,

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a low head, high capacity pump set will be installed to pump water directly from the Nile to the designated command area. A system will be maintained to assure that in all the ponds where fish culture has been initiated, the water is maintained at required levels through periodic water recharging. Soil samples will be taken from proposed irrigated lands to serve as a basis for crop selection and fertilization programs.

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tactical arena A
EXPANDING
FUNDAMENTAL ECONOMIC BASE

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Plate 4A

paratactic I

BUSINESS DEVELOPMENT

paratactic IX

AGRICULTURAL PRODUCTION

tactic 1: Commercial Ventures

- 1 Beni Suef Market
- 2 Commodity Outlet
- 3 Food Bazaar
- 4 Commercial Association
- 5 Credit Union
- 6 Cooperative Store

tactic 27: Cropping Methods

- 181 Superior Seeds
- 182 Cash Crops
- 183 Nutritional Produce
- 184 Coordinated Cropping
- 185 Weed Control
- 186 Agricultural Machinery
- 187 Deep Ploughing

tactic 2: Construction Industry

- 7 Clay Source
- 8 Brick Press
- 9 Storage Yard
- 10 Trial Test
- 11 Local Kiln
- 12 Quarry Safety
- 13 Stone Products
- 14 Cement Manufacture

tactic 28: Animal Husbandry

- 188 Quality Cattle
- 189 Feed Supplements
- 190 Disease Control
- 191 Poultry Stock
- 192 Rabbit Farm
- 193 Bee Project
- 194 Silkworm Cultivation

tactic 3: Food Processing

- 15 Flour Mill
- 16 Sesame Products
- 17 Processing Equipment
- 18 Prepared Foods
- 19 Quality Eggs
- 20 Cheese Varieties
- 21 Packaged Honey
- 22 Salted Fish

tactic 29: Fish Farm

- 195 Tilapia Stock
- 196 Breeding Ponds
- 197 Weir Gates
- 198 Screen Barriers
- 199 Waste Feeds
- 200 Pilot Pool

tactic 4: Crafts Production

- 23 Pottery Trade
- 24 Egyptian Designs
- 25 Master Craftsman
- 26 Studio Workshop
- 27 Craft Tools
- 28 Reed Mats
- 29 Loom Crafts
- 30 Crocheted Goods
- 31 Sales Contracts

tactic 30: Full Irrigation

- 201 Channel Improvements
- 202 Training Demonstration
- 203 Delivery Regulation
- 204 Reclamation Areas
- 205 Lowland Network
- 206 Highland Network
- 207 Island Development
- 208 System Maintenance
- 209 Soil Samples

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tactical arena B
DEVELOPING
INCLUSIVE SOCIAL FORMS

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Plate 4B

paratactic II

CULTURAL EXTENSION

tactic 5: Global Awareness

- 32 Organized Trips
- 33 Student Exchange
- 34 Audio-visual Materials
- 35 Library Visits
- 36 Public Telephone
- 37 Periodical Rack

tactic 6: Information Interchange

- 38 Program Papers
- 39 Quarterly Reporting
- 40 Bulletin Boards
- 41 Reading Room
- 42 Mobile Loudspeaker
- 43 Information Network

tactic 7: Community Identity

- 44 Welcome Signs
- 45 Village Symbol
- 46 Residence Plaques
- 47 Street Names
- 48 Public Art
- 49 Product Labels

paratactic VIII

LOCAL ORGANIZATION

tactic 24: Work Projects

- 166 Yearly Rhythm
- 167 Service Corps
- 168 Volunteer Force
- 169 Weekly Workdays
- 170 One-day Miracles

tactic 25: Engagement Forms

- 171 Community Guilds
- 172 Planning Meetings
- 173 Task Commissions
- 174 Quarterly Evaluation

tactic 26: Care Network

- 175 Systematic Visitation
- 176 Village Grid
- 177 Services Directory
- 178 Literacy Tutors
- 179 Significant Celebrations
- 180 Community Calendar

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tactical arena C
SHAPING
BASIC VILLAGE STRUCTURES

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Plate 4C

paratactic III

VILLAGE CONSTRUCTION

paratactic VII

ESSENTIAL SERVICES

tactic 8: Public Facilities

- 50 Outdoor Market
- 51 Service Center
- 52 Meeting Places
- 53 Docking Facility
- 54 Business Building
- 55 Storage Unit

tactic 20: Medical Care

- 129 Bilharziasis Treatment
- 130 Field Toilets
- 131 Snail Eradication
- 132 Massive Diagnosis
- 133 Preventive Immunization
- 134 Medical Records
- 135 Mother-Child Clinic
- 136 Vitamin Supplements
- 137 Pharmaceutical Supplies
- 138 Essential Equipment
- 139 Health Liaison
- 140 Full-time Nurse

tactic 9: Space Design

- 56 School Grounds
- 57 Community Nodes
- 58 Village Plan
- 59 Village Square
- 60 Leveled Streets
- 61 Paved Roads
- 62 Green Plantings

tactic 21: Electrical Power

- 141 System Design
- 142 Diesel Generator
- 143 Underwater Cable
- 144 Distribution Network
- 145 Public Lighting
- 146 Electric Commission
- 147 Maintenance Crew

tactic 10: Housing Renovation

- 63 Housing Survey
- 64 Architects Design
- 65 Local Materials
- 66 Cement Floors
- 67 Window Protection
- 68 Renovation Schemes
- 69 Model Home

tactic 22: Water Supply

- 148 Bore Wells
- 149 Distribution Points
- 150 Delivery System
- 151 Turbine Pump
- 152 Reserve Pump
- 153 Pump House
- 154 Installation Materials
- 155 Water Tower
- 156 Local Sanitation
- 157 Storage Vessels

tactic 11: Sanitation System

- 70 Public Toilets
- 71 Shower Units
- 72 Laundry Facilities
- 73 Sewage Tanks
- 74 Compost Storage
- 75 Tank Truck
- 76 Rubbish Bins
- 77 Animal Pens

tactic 23: Community Equipment

- 158 Motor Boat
- 159 Village Minibus
- 160 Flatbed Truck
- 161 Pick-up Truck
- 162 Repair Shed
- 163 Secure Locker
- 164 Construction Equipment
- 165 Maintenance Tools

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tactical arena D
EXTENDING
FUNCTIONAL LEARNING TOOLS

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Plate 4D

paratactic IV

PRACTICAL TRAINING

paratactic VI

COMMUNITY EDUCATION

tactic 12: Employment Skills

- 78 Technical Training
- 79 Maintenance Program
- 80 Resident Technician
- 81 Construction Trades
- 82 Business Techniques

tactic 17: Adult Leadership

- 110 Social Methods
- 111 Literacy Program
- 112 Basic Education
- 113 Management Apprentices
- 114 Community Curriculum

tactic 13: Family Living

- 83 Sewing Classes
- 84 Handicrafts Demonstrations
- 85 Foods Laboratory
- 86 Menu Planning
- 87 Household Budgeting

tactic 18: Formal Schooling

- 115 Preparatory Classes
- 116 Early Curriculum
- 117 Teachers Meetings
- 118 Summer Courses
- 119 Classroom Decor
- 120 Orientation Sessions
- 121 Tutoring Programs

tactic 14: Physical Health

- 88 Health Education
- 89 Hygienic Practices
- 90 Dietary Supplements
- 91 Child Care
- 92 School Lunches
- 93 Family Planning

tactic 19: Cultural Events

- 122 Film Series
- 123 Audio-visual Equipment
- 124 Singing Groups
- 125 Guest Performers
- 126 Games Days
- 127 Heritage Events
- 128 Open-day Series

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tactical arena E
ESTABLISHING
SUPPORTIVE PROJECT RELATIONS

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Plate 4E

paratactic V

PROJECT RELATIONS

tactic 15:

External Support

- 94 Community Ambassadors
- 95 Funding Plan
- 96 Consultant Services
- 97 Government Assistance
- 98 Private Support
- 99 In-kind Gifts
- 100 Individual Donors
- 101 Credit Lines
- 102 Development Loans
- 103 Fiscal Accountability

tactic 16:

Economic Foundations

- 104 Information Access
- 105 Market Development
- 106 Volume Purchasing
- 107 Consumer Analysis
- 108 Specialty Promotion
- 109 Market Relations

PART FIVE

THE ACTUATING PROGRAMS

PROGRAMS

The final task of the Consult was organizing the Tactical Systems into Actuating Programs. The programs provide precise structures of forms within which specific tactics are carried out. They perform several essential functions. The programs make possible abroad cost analysis of the project and thereby become crucial instruments for its funding. They enable the creation of a relatively accurate phasing design for the total demonstration. They serve to organize both the local forces who implement the project and the extended forces who form the support network. Finally, they release an imaginal power that motivates the local people, the project patrons and the public at large by reflecting the possibility, the inclusiveness and the unity of the Human Development Project.

PROCESS

The creation of Actuating Programs first involves organizing the large body of subtactics into rational programs that are feasible in the light of the local situation and practical for effective management. These are then checked and refined in relation to the Proposals, the Contradictions and the Practical Vision to ensure inclusiveness and focus. Certain values are held throughout the process of organizing the programs, including their dramatic power to generate interest, and the possibilities for their rapid development. Identifying the programs is the first step in project actuation for they define the arenas and organize the tactics for which implementaries are then created. Implementaries are the concrete steps to be taken by the local forces in doing the subtactics and programs. Each required step, once determined, is placed on a daily, weekly or monthly timeline. The creation of Timelined Implementaries, however, is not a task of the Consult but of the local forces themselves.

The Actuating Programs of the Bayad Human Development Project shown on Plate 5 are seventeen in number. Seven of these are related to reconstruction of social well-being in Bayad. The intent of these programs is to broaden the existing physical and social structures for developing a new sense of community prosperity. Four of the seven relate to practical welfare and three relate to societal

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RESULTS

engagement. The practical welfare arena includes a Complete Health Clinic, a Unified Nutrition Service, a Total Functional Education effort and an Informal Schooling Institute. The three programs relating to societal engagement are the Womens Activity Society, the Young Citizens Corps and the Early Learning Center. The second major programmatic division has to do with the reconstruction of community dependency in Bayad. This arena includes three programs: the Bayad Renovation Project, the Bayad Development Corporation and the Bayad Village Plaza. The third group of seven programs relates to the reconstruction of economic sufficiency in Bayad. Three of these deal with systematic support and four with expanded income. The first group of economic programs includes a Domestic Water System, a Desert Reclamation Enterprise and an Essential Services Network. The second group, dealing with expanded income, includes a Building Materials Company, the Small Industry Development effort, the Intensive Agricultural Production enterprise and the Livestock Raising Combine.

SUMMARIES

A major detailed description of each of the seventeen Actuating Programs follows. These summaries are not intended to fully describe the programs but to indicate the general focus of each, the relationships among the programs, and the relationships between each program and the whole project. Each summary is comprised of three paragraphs. The first describes the broad functional nature of the program and explains why it is necessary to the total Project. The second delineates the four major components. The last paragraph indicates the general requirements for implementing the program. This is in no way a specific effort to do the Timelined Implementaries of the subtactics mentioned earlier. The program summary, rather, points to the broad steps involved and thus provides some feel after the practical feasibility of the program. Accompanying each summary is a four year cost projection (Plates 5A - 5Q).

THE SEVENTEEN ACTUATING PROGRAMS
Comprehensive Community Reformulation in Bayad

| ONE TOWARD THE RECONSTRUCTION OF LOCAL SOCIAL WELL-BEING | | TWO TOWARD THE RECONSTRUCTION OF | THREE TOWARD THE RECONSTRUCTION OF LOCAL ECONOMIC SUFFICIENCY | |
|--|------------------------------------|---|---|--|
| PRACTICAL WELFARE A | SOCIETAL ENGAGEMENT B | LOCAL COMMUNITY DEPENDENCY C | SYSTEMATIC SUPPORT D | EXPANDED INCOME E |
| COMPLETE HEALTH CLINIC I | WOMENS ACTIVITY SOCIETY V | BAYAD RENOVATION PROJECT VIII | DOMESTIC WATER SYSTEM XI | BUILDING MATERIALS COMPANY XIV |
| UNIFIED NUTRITION SERVICE II | | YOUNG CITIZENS CORPS VI | BAYAD DEVELOPMENT CORPORATION IX | DESERT RECLAMATION ENTERPRISE XII |
| TOTAL FUNCTIONAL EDUCATION III | EARLY LEARNING CENTER VII | BAYAD VILLAGE PLAZA X | ESSENTIAL SERVICES NETWORK XIII | INTENSIVE AGRICULTURAL PRODUCTION XVI |
| INFORMAL SCHOOL INSTITUTE IV | | LIVESTOCK RAISING COMBINE XVII | | |

THE SEVENTEEN ACTUATING PROGRAMS

| ONE TOWARD THE RECONSTRUCTION OF LOCAL SOCIAL WELL-BEING | | | | TWO TOWARD THE RECONSTRUCTION OF LOCAL COMMUNITY DEPENDENCY | | THREE TOWARD THE RECONSTRUCTION OF LOCAL ECONOMIC SUFFICIENCY | | | |
|--|----|---------------------------|----|--|----|---|----|-----------------------------------|----|
| PRACTICAL WELFARE A | | SOCIETAL ENGAGEMENT B | | LOCAL COMMUNITY DEPENDENCY C | | SYSTEMATIC SUPPORT D | | EXPANDED INCOME E | |
| I | | V | | VIII | | XI | | XIV | |
| II | | VI | | IX | | XII | | XV | |
| III | | VII | | X | | XIII | | XVI | |
| IV | | VIII | | XI | | XIV | | XVII | |
| COMPLETE HEALTH CLINIC | 1 | WOMENS ACTIVITY SOCIETY | 17 | BAYAD RENOVATION PROJECT | 29 | DOMESTIC WATER SYSTEM | 41 | BUILDING MATERIALS COMPANY | 53 |
| | 2 | | 18 | | 30 | | 42 | | 54 |
| | 3 | | 19 | | 31 | | 43 | | 55 |
| | 4 | | 20 | | 32 | | 44 | | 56 |
| UNIFIED NUTRITION SERVICE | 5 | YOUNG CITIZENS CORPS | 21 | BAYAD DEVELOPMENT CORPORATION | 33 | DESERT RECLAMATION ENTERPRISE | 45 | SMALL INDUSTRY DEVELOPMENT | 57 |
| | 6 | | 22 | | 34 | | 46 | | 58 |
| | 7 | | 23 | | 35 | | 47 | | 59 |
| | 8 | | 24 | | 36 | | 48 | | 60 |
| TOTAL FUNCTIONAL EDUCATION | 9 | EARLY LEARNING CENTER | 25 | BAYAD VILLAGE PLAZA | 37 | ESSENTIAL SERVICES NETWORK | 49 | INTENSIVE AGRICULTURAL PRODUCTION | 61 |
| | 10 | | 26 | | 38 | | 50 | | 62 |
| | 11 | | 27 | | 39 | | 51 | | 63 |
| | 12 | | 28 | | 40 | | 52 | | 64 |
| INFORMAL SCHOOL INSTITUTE | 13 | LIVESTOCK RAISING COMBINE | 29 | BAYAD DEVELOPMENT CORPORATION | 41 | DOMESTIC WATER SYSTEM | 53 | SMALL INDUSTRY DEVELOPMENT | 65 |
| | 14 | | 30 | | 42 | | 54 | | 66 |
| | 15 | | 31 | | 43 | | 55 | | 67 |
| | 16 | | 32 | | 44 | | 56 | | 68 |

SOCIAL WELL-BEING: Actuating Program 1

COMPLETE HEALTH CLINIC

Adequate health care for both humans and animals is an important factor in any rural community. The Complete Health Clinic is a program designed to upgrade the existing health and veterinary clinics, and to expand emergency assistance to around-the-clock availability. The population increase of the past decade, and the growing number of large and small animals is a reality facing all rural communities up and down the Nile. Disease control has become a burdensome task. Blood diseases, parasites and the ever-present Bilharzia fluke are common factors of Egyptian farm life. The village people of Bayad desire improved health care structures with an immunization and health education program to begin to eradicate such prevalent diseases. The improvement of the community's health standards will allow Bayad to become a sign for all Egyptian villages of local people's ability to give shape to a total health environment.

The Complete Health Clinic will provide comprehensive health care for the entire village through four components. First, the Disease Prevention Program will effect a system for controlling disease by providing routine examinations, basic health education and immunization. Second, the Medical Equipment Program will upgrade the facilities available to the present medical center. Third, the Integrated Staff Program will allow a staff of Bayad villagers to maintain a system of records essential to the health care of all the people. It will also maintain a village paramedic team. Fourth, the Specialized Services Program will make health care available in areas such as dentistry, pediatrics, obstetrics, ophthalmic and geriatric care. These specialized services will be scheduled in a way that will allow minimal disruption of the daily village life while providing adequate, ongoing care and an emergency medical service.

Permission from the Beni Suef Governorate will be obtained immediately to establish emergency equipment in the existing clinics. These will include items such as sterilizers, suture instruments, forceps, examination chairs and file cabinets. Adequate human and animal vaccines and serums will be provided to implement inoculations. On-the-job training of seven village women as a part-time and full-time paramedic teams will begin immediately. Staff from the village will be trained to keep medical records on every patient for use by examining personnel. A referral system will be set up as a liaison with Beni Suef and Cairo hospitals. A program of regular visits from local dentists, optometrists, pediatricians and obstetricians will be started. In addition, an emergency service will be provided during off hours, complete with a means of conveying persons in need of urgent hospitalization to Beni Suef. There will be a follow-up program for children, pregnant women and elders.

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FOUR YEAR PLAN
PROGRAM BUDGETS

Program 1

Plate 5A

COMPLETE HEALTH CLINIC

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| years | current FY budget | Future Estimated Costs | | | |
|-------------------------------|--|------------------------|-----------|-----------|-----------|
| | | FY II | FY III | FY IV | |
| categories | | | | | |
| I Capital Costs | Examination equipment | ££ 200 | ££ 100 | ££ 100 | ££ 100 |
| | Sterilization equipment | 200 | | | |
| | 2 Scales | 130 | | | |
| | Refrigerator | 200 | | | |
| | Office equipment | 200 | 50 | 50 | 50 |
| | | | | | |
| | subtotal - capital | 930 | 150 | 150 | 150 |
| II Pay and Allowance | 1 Midwife trainee | 600 | 600 | 600 | 600 |
| | 7 Paramedics (1 day/week) | 1680 | 2200 | 2200 | 2200 |
| | 1 Auxiliary salary | 4000 | 4000 | | |
| | ½ time Nutritionist | 600 | 600 | | |
| | 1 Administrator trainee | 360 | 360 | 360 | |
| | | | | | |
| | subtotal - capital | 7240 | 7760 | 3160 | 2800 |
| III Current Expenses | Immunization Materials | 2000 | 2000 | 2000 | 2000 |
| | Telephone installation | 50 | 36 | 36 | 36 |
| | General Medical supplies | 10000 | 5000 | 5000 | 5000 |
| | Educational Materials | 150 | 50 | 50 | 50 |
| | Office Supplies | 100 | 50 | 50 | 50 |
| | Bilharzia Treatment (est. 50/pers. for 1500) | 45000 | 5000 | 5000 | |
| | Minibus Ambulance | (elsewhere) | | | |
| | | subtotal - current | 57,300 | 12,136 | 12,136 |
| | Total Program Cost | ££ 65,170 | ££ 20,046 | ££ 15,440 | ££ 10,086 |

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SOCIAL WELL-BEING: Actuating Program 2

UNIFIED NUTRITION SERVICE

The Unified Nutrition Service is designed to obtain a quantitative and qualitative improvement of the general nutritional state of the villagers of Bayad. This will make a major contribution to the health and vitality of the Bayad population. Unbalanced diets may cause retarded growth, dental problems and a weakened ability to work, hampering development of the individual and the community as a whole. Noticeable improvement can be made by introducing nutrition education which includes a practical demonstration, and by making available balanced meals which provide basic nutritional components. Special attention will be paid to those periods of life during which physical well-being and development are most critical. The simultaneous tackling of different aspects of the situation is necessary in order to upgrade the nutritional standards of the whole village as quickly as possible. As good health is a basic issue in human development, this project is an essential component.

The Unified Nutrition Service will raise the standard of nutrition through four components. First, the Maternal Child Diet Program will teach mothers how to design balanced diets with locally available foods, particularly in order to overcome the nutrition deficiencies which occur during weaning and lactation. Second, the School Meals Program will provide a daily meal for all children involved in the school system. It will also set up a meal structure for those adults attending evening classes. Third, the Community Garden Program will provide Bayad residents with essential vitamins and a regular supply of fresh vegetables. This program will draw on special garden plots in the newly reclaimed desert areas. Fourth, the Dietary Education Program will provide basic instruction in nutrition, including purchasing, preparation and conservation of foods.

This program will be implemented in several ways. Nursing mothers will be exposed to a program of nutrition instruction which includes group discussions, talks and the use of relevant educational materials. Mothers of infants will be encouraged to take advantage of a balanced midday meal and where necessary, to use vitamin supplements. A system of school meals for all school children, preschool through primary school, and for adults who attend the evening classes will be available within two months of Project initiation. The Women's Activity Society and the Young Citizens Corps will staff the program. A community garden will be planted in the lowland desert as soon as irrigation is available. Later it will move to the newly-irrigated high desert behind the village. Nutrition classes will be offered to adults through the evening school.

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FOUR YEAR PLAN
PROGRAM BUDGETS

Program 2

Plate 5B

UNIFIED
NUTRITION SERVICE

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| Categories | years | current | Future Estimated Costs | | |
|-------------------------------|---------------------------|-----------|------------------------|----------|----------|
| | | FY | FY II | FY III | FY OV |
| | | Budget | | | |
| I Capital Costs | Kitchen Facility | ££ 6000 | | | |
| | Stainless Steel Equipment | 1200 | | | |
| | Eating Utensils | 400 | ££ 300 | ££ 300 | ££ 300 |
| | Refrigerator | 2500 | | | |
| | subtotal - capital | 10100 | 300 | 300 | 300 |
| II Pay and Allowance | 1 Auxiliary salary | 4000 | 4000 | | |
| | 2 Cooks | 2400 | 2400 | 2400 | 2400 |
| | 7 Assistants | 2100 | 2100 | 2100 | 2100 |
| | Nutritionist (½ time) | 600 | 600 | | |
| | subtotal - pay | 9100 | 9100 | 4500 | 4500 |
| III Current Expenses | Diet supplements | 400 | 400 | 400 | 400 |
| | Cooking supplies | 500 | 500 | 500 | 500 |
| | Detergent | 150 | 150 | 150 | 150 |
| | Disinfectant | 150 | 150 | 150 | 150 |
| | Travel | 300 | 300 | 300 | 300 |
| | Fuel | 300 | 300 | 300 | 300 |
| | Education Materials | 150 | 100 | 100 | 100 |
| subtotal - current | 1950 | 1900 | 1900 | 1900 | |
| Total Program Cost | | ££ 21,150 | ££ 11,300 | ££ 6,700 | ££ 6,700 |

SOCIAL WELL-BEING: Actuating Program 3

TOTAL FUNCTIONAL EDUCATION

New industries, technical advances in agriculture, new retail outlets and the physical renovation of the village are dependent upon a labor force equipped with new skills. Total Functional Education is intended to rapidly create a pool of skilled technicians and competent businessmen within Bayad. The program is built on the recognition that much of this training must take place on the job. As the village moves to new levels of skills, it is equally important that the overall citizenry make progress in achieving a new level of literacy. The Bayad Human Development Project depends on the creation of village leadership that has appropriated the full scope of community reformulation principles and methods and is prepared to assume responsibility for the ongoing community progress. Such a sign of local leadership will be invaluable to the future of not only Bayad, but also to all of the 29,000 villages and hamlets in Egypt.

Total Functional Education will train the Bayad residents in needed skills through four components. First, the Technical Training Program will provide Bayad with the skills necessary to bring to and maintain new technology in the village. This training will be primarily done on-the-job with the villagers learning agricultural and technical skills in the field. Second, the Commercial Skills Program will provide training in the business practices such as office skills, accounting, marketing and management. It will use workshop and imaginal education techniques. Third, the Leadership Methods Program will be used to train the residents of Bayad to assume direction of the project. Fourth, the Basic Literacy Program will be a massive effort to enable all the citizens of Bayad to read, write and handle basic mathematics at a daily functional level.

The implementation of Total Functional Education will begin immediately by engaging a small group of village men in the installation and maintenance of irrigation pumps and motors, electrical generators, transportation and farming equipment. Agricultural consultants will enable the village farmers to receive on-the-job training and help in proper agricultural methods. Another group of men will be trained in construction and carpentry skills for the village housing rehabilitation project. Apprenticeship training in business will be provided through the Information Bureau, the Bayad Development Corporation and the new village industries. The Information Bureau will advertise basic literacy classes for adults in the evening. This class can be set up and staffed immediately. This training will be applied throughout the Project in both community guild structures and task team meetings as well as by individual contact with the auxiliary.

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FOUR YEAR PLAN
PROGRAM BUDGETS

Program 3

Plate 5 C

TOTAL FUNCTIONAL EDUCATION

ICA Consultants

| years | current FY budget | Future Estimated Costs | | | |
|-------------------------------|---------------------------|------------------------|----------|----------|----------|
| | | FY II | FY III | FY IV | |
| categories | | | | | |
| I Capital Costs | Duplicating machine | £E 300 | | | |
| | Typewriters (2) | 700 | | £E 350 | |
| | Workshop equipment | 500 | | | |
| | Furniture | 400 | £E 100 | 100 | £E 100 |
| | Building renovation | 1000 | 100 | 50 | 50 |
| | | | | | |
| subtotal - capital | | 2900 | .200 | 500 | 150 |
| II Pay and Allowance | 4 part time tradesmen | 1200 | 1200 | 1200 | 1200 |
| | Mechanical Consultant | 1500 | 1500 | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| subtotal - pay | | 2700 | 2700 | 1200 | 1200 |
| III Current Expenses | Books | 500 | 200 | 200 | 100 |
| | Writing Materials | 250 | 200 | 200 | 200 |
| | Supplies | 500 | 450 | 450 | 450 |
| | Travel (training courses) | 2000 | 2000 | 2000 | 2000 |
| | | | | | |
| | | | | | |
| subtotal - current | | 3250 | 2850 | 2850 | 2750 |
| Total Program Cost | | £E 8,850 | £E 5,750 | £E 4,550 | £E 4,100 |

SOCIAL WELL-BEING: Actuating Program 4

INFORMAL SCHOOLING INSTITUTE

Throughout the world educational systems have been hard pressed to keep pace with the changes impacting all the structures of society. Any serious development project, therefore, must deal with providing educational assistance. While honoring the objectives and formal curriculum of the existing school program, the Informal Schooling Institute is concerned with supplementing formal education at many levels by providing practical methods that will enable the students to creatively engage their lives in the village, the governorate, and the nation. Drawing upon the local wisdom of teachers, parents and village leaders, the village will work toward completion of and competence in formal education. This objective, coupled with supplementary training in social responsibility and methods, will provide each Bayad citizen with the self-esteem and capability that results from educational achievement.

The Informal Schooling Institute consists of four components. First, the Primary Extension Program will provide final year primary students who have marginal academic standing with the opportunity to have another year of education in order to prepare them to enter the Preparatory School. Second, the Preparatory School Program will work with the Beni Suef Governorate to make formal education more accessible to the twelve to fifteen year olds of Bayad. Third, the Student Afternoon Program will provide an after-school hours extra curricular enrichment opportunity. This program will use activities that encourage global awareness, heritage recovery, community responsibility and community participation methods suitable for youth. Fourth, the Evening School Program will make available a continuing school education to those adults and youth who have had a basic education in the past and are presently consumed with the support of their families.

Working in coordination with the school staff of the Bayad Primary School and the Ministry of Education, the auxiliary staff will, at the initiation of the Project, establish educational structures that will supplement these available schools. A Primary Extension class will be set up within the first month of the Project in the existing primary school. The auxiliary will staff this class and will also use this opportunity to train village assistants in imaginal education methods. Extra-curricular activities will begin for primary school students in the afternoon. Student trips to Beni Suef, Cairo and the famous landmarks of Egypt will be designed and implemented. Audio-visual equipment will be purchased for classroom use. The after-school program will also prepare the children to present celebrative programs to the entire community on festival days. An Adult Evening School will be established by the auxiliary for those village adults wishing to further their education.

BHP

FOUR YEAR PLAN
PROGRAM BUDGETS

Program 4

Plate 5D

INFORMAL SCHOOLING INSTITUTE

ICA Consultants

| categories | years | current FY budget | Future Estimated Costs | | |
|-------------------------------|-------------------------|-------------------------|------------------------|----------|----------|
| | | | FY II | FY III | FY IV |
| | | | | | |
| I Capital Costs | Building | £E 5,000 | | | |
| | Furniture | 1,500 | £E 200 | £E 200 | £E 200 |
| | Sound Film Projector | 500 | | | |
| | Projection Screen | 50 | | | |
| | Slide Projector | 225 | | | |
| | Mimeograph Duplicator | 675 | | | |
| | | | | | |
| | subtotal - capital | 7,950 | 200 | 200 | 200 |
| II Pay and Allowance | Teachers (3) | 1,080 | 1,080 | 1,080 | 1,080 |
| | Teachers Assistants (6) | 1,440 | 1,440 | 1,440 | 1,440 |
| | Auxiliary Salary | 3,000 | 3,000 | | |
| | | | | | |
| | | | | | |
| | subtotal - pay | 5,520 | 5,520 | 2,520 | 2,520 |
| III Current Expenses | Travel | 1,000 | 1,000 | 1,000 | 1,000 |
| | Supplies | 400 | 400 | 400 | 400 |
| | Books | 300 | 300 | 300 | 300 |
| | | | | | |
| | subtotal - current | 1,700 | 1,700 | 1,700 | 1,700 |
| | Total Program Cost | £E 15,170 | £E 7,420 | £E 4,420 | £E 4,420 |

SOCIAL WELL-BEING: Actuating Program 5

WOMEN'S ACTIVITY SOCIETY

Women around the world today are broadening their concerns about social services and forging out new arenas of interests. Releasing this creative power in the Bayad women will be of benefit to the social rebuilding of the whole community. The Women's Activity Society is a specialized program intended to expand the women's knowledge of domestic skills, thereby enabling them to improve the style of life of the whole village. They will be able to provide clothes for individual family use as well as manufacture rugs and other household items for domestic use. As their competence increases in needlecraft and handicraft work, they will be able to supplement the family income. Their newly developed skills will enable them to more effectively care for the village's health and social environment. The Bayad women will play a vital role in the total development effort of the village and be an example for other villages of new possibility.

The Women's Activity Society consists of four components. First, the Domestic Hygiene Program will include instruction in maintaining a sanitary water supply and methods of food storage. Second, a Pre and Post Natal Program will teach the importance of care during pregnancy, give instruction on the use of vitamin and mineral supplements, and demonstrate the care needed by infants for adequate growth development. Education in family planning will also be included. Third, a Community Oven Program will provide a facility for baking bread goods. It will also function as a social setting where women can share knowledge and be instructed on the importance of balanced nutrition. Fourth, the Home Crafts Program will teach the use of sewing machines, patterns and fabrics and provide instruction in weaving, pottery making and needlework.

In the first month of the Project, the auxiliary staff will recruit village women to special demonstration classes on domestic hygiene. They will gather in one of the village homes. Demonstrations in nutrition and menu planning will be provided in conjunction with the domestic hygiene classes. Ten village women will be specially trained to set up these demonstrations in other homes in the village so that all the women receive instruction. One of the health clinic nurses will use this opportunity to also train mothers in pre and post-natal care. A large community oven will be constructed and a trained group of village women will give instructions on baking and ways of expanding menu planning of nourishing meals. Sewing machines and handicraft tools will be procured for homecraft creations. Women's craft guilds will be set up in homes throughout Bayad.

BHDP

FOUR YEAR PLAN
PROGRAM BUDGETS

Program 5

Plate 5E

ICA Consultants

WOMEN'S ACTIVITY SOCIETY

| years | current FY budget | Future Estimated Costs | | | |
|-------------------------------|-------------------------|------------------------|----------|----------|----------|
| | | FY II | FY III | FY IV | |
| I Capital Costs | Furniture | £E 400 | £E 150 | £E 150 | £E 150 |
| | Room Renovation | 150 | | | |
| | Typewriter | 350 | | | |
| | Sewing Machines (10) | 1500 | | | |
| | Pottery Wheel (1) | 50 | | | |
| | Weaving Loom (1) | 20 | | | |
| | subtotal - capital | 2470 | .150 | 150 | 150 |
| II Pay and Allowance | Community workers (2) | 600 | 600 | 600 | 600 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | subtotal - pay | 600 | 600 | 600 | 600 |
| III Current Expenses | Cloth | 200 | 200 | 200 | 200 |
| | Garbage pails (300) | 150 | 25 | 25 | 25 |
| | Sewing Supplies | 100 | 100 | 100 | 100 |
| | Machine Maintenance | 50 | 50 | 50 | 50 |
| | subtotal - current | 500 | 375 | 375 | 375 |
| Total Program Cost | | £E 3,570 | £E 1,125 | £E 1,125 | £E 1,125 |

BHDP
ICA Consultants

SOCIAL WELL-BEING: Actuating Program 6

YOUNG CITIZENS CORPS

Bayad youth, like those of other communities today seek ways to become significantly engaged in efforts that bear relationship to their future. The Young Citizens Corps builds on this readiness by giving shape to activities that engage the energy of the youth in activities which effect results that they and the community can see. The recreation and maintenance of village space call for a large body of able workers who can function corporately in the practical tasks of physical reconstruction. The Young Citizens Corps will provide this work force and also release the leadership potential of youth in broader service to the whole community.

The Young Citizens Corps will activate the participation of the youth of Bayad through four components. First, the Youth Apprenticeship Program will employ qualified young village youth in on-the-job training with master craftsmen in order to learn necessary skills for particular future jobs. Second, the Village Service Program will involve youth in crucial services for the entire community. This program will enable a large work force to be directly engaged in village projects. Third, the Supplementary Tutoring Program will use literate youth to teach reading and writing skills on a part time basis. They will also help in providing special instruction in areas such as health training when needed. Fourth, the Special Projects Program will employ young men and women of the village in special community events, especially those requiring physical labor.

To begin the implementation of the Young Citizens Corps a selected group of village youth will begin working as apprentices in the Building Construction Program, in the new small industries and in the farming of reclaimed desert lands and islands. Other youth will help in the first community work day projects. They will be assigned to the Communication Office to distribute information throughout the village and help in constructing the public bath houses, toilets and rebuilding the irrigation canal. A small group of literate youth will begin tutoring adults in weekday and evening sessions in basic literacy. They will also instruct children in the Early Learning Center and villagers in special seminars on important health and nutrition matters. When the School Meals Program is established the Youth Corps will assist in preparing and serving of meals. They will also be in charge of cleaning the village streets, maintaining the village plaza and performing other beautification tasks.

BHDP

FOUR YEAR PLAN
PROGRAM BUDGETS

Program 6

Plate 5F

YOUNG CITIZENS CORPS

ICA Consultants

| categories | years | current FY budget | Future Estimated Costs | | |
|-------------------------------|-------------------------|-------------------------|------------------------|----------|----------|
| | | | FY II | FY III | FY IV |
| I Capital Costs | Typewriter | £E 350 | | | |
| | Minibus | 6,000 | | | |
| | Building Rehabilitation | 100 | £E 25 | £E 25 | £E 25 |
| | File Cabinet | 50 | | | |
| | | | | | |
| subtotal - capital | | 6,500 | 25 | 25 | 25 |
| II Pay and Allowance | Apprentices (10) | 1,800 | 1,800 | 900 | 900 |
| | Tutors (8) | 1,920 | 1,920 | 1,920 | 1,920 |
| | Youth Work Force (40) | 4,800 | 4,800 | 4,800 | 4,800 |
| | | | | | |
| | | | | | |
| subtotal - pay | | 8,520 | 8,520 | 7,620 | 7,620 |
| III Current Expenses | Rent | 60 | 60 | 60 | 60 |
| | Office Supplies | 40 | 40 | 40 | 40 |
| | Work Tools | 50 | 25 | 25 | 25 |
| | Cleaning Tools | 30 | 30 | 30 | 30 |
| | Cleaning Supplies | 60 | 60 | 60 | 60 |
| subtotal - current | | 240 | 215 | 215 | 215 |
| Total Program Cost | | £E 15,260 | £E 8,760 | £E 7,860 | £E 7,860 |

SOCIAL WELL-BEING: Actuating Program 7

EARLY LEARNING CENTER

The Early Learning Center is an effort to take seriously the education of the children of Bayad as a means of ensuring their responsible participation in the future. The youngsters of the village manifest an intelligence and eagerness to learn. The Early Learning Center will be a means of building on this openness to ensure that the foundations of education are provided early in their lives. With the development of schooling programs the participant children will assimilate basic knowledge and skills, and through the introduction of school meals their health and physical development can benefit. A project for training young local teachers will complement the efforts of the Early Learning Center, creating a continuity between teacher, pupil and parent. Such efforts will, in a short time, reveal a new generation of children.

The Early Learning Center consists of four components. First, the Infant School Program will provide care and basic education for infants of the community. It will focus on developing motor skills and inclusive cultural images through color, art and music. Second, the Nursery School Program will advance comprehensive education by preparing two year olds for the more formalized structures of the Preschool. Third, the Preschool Learning Program will equip the young children with a basic foundation for intellectual and social growth. Children between four and seven years will participate in a full day's program that includes formal classes, play, rest and nutritious meals. Fourth, the Teacher Training Program will provide training sessions for Bayad adults to further develop teaching skill. The training will include practice teaching in the Early Learning Center as well as workshops on teaching methods.

Every child in Bayad between the ages of two months and six years will have the opportunity to participate in the Early Learning Center. The implementation of the Center will begin the first month. Facilities will be acquired from a number of vacant properties in the village. A comprehensive materials and equipment list will then be acquired through purchases or contributions using local resources where applicable. The Women s Activity Society will be called upon to make school uniforms for all the children. The staff will include teacher trainees from Bayad who will be trained over the next two years to assume leadership of the Center. The combined staff will hold reporting and planning meetings to assure a common understanding of the curriculum and procedures for each day. Regular monthly meetings with the children's parents will be held to encourage the village's participation in the education of the children.

BHDP

FOUR YEAR PLAN
PROGRAM BUDGETS

Program 7

Plate 5G

EARLY LEARNING CENTER

ICA Consultants

| years | current FY budget | Future Estimated Costs | | | |
|---------------------------|-------------------------|------------------------|------------------|-----------------|-----------------|
| | | FY II | FY III | FY IV | |
| I | | | | | |
| Capital Costs | Equipment | £E 1,000 | £E 300 | £E 200 | £E 100 |
| | Teaching Aids | 300 | 100 | 100 | 100 |
| | Playground Equipment | 300 | 50 | 50 | 50 |
| | Buildings Renovation | 3,000 | 50 | 50 | 50 |
| | subtotal - capital | 4,600 | 500 | 400 | 300 |
| II | | | | | |
| Pay and Allowances | Auxiliary Salary | 4,000 | 4,000 | | |
| | Trainee | 600 | 600 | 600 | 600 |
| | Community Aides (20) | 6,000 | 6,000 | 6,000 | 6,000 |
| | subtotal - pay | 10,600 | 10,600 | 6,600 | 6,600 |
| III | | | | | |
| Current Expenses | Buildings Rent | 180 | 180 | 180 | 180 |
| | subtotal - current | 180 | 180 | 180 | 180 |
| Total Program Cost | | £E 15,380 | £E 11,280 | £E 7,180 | £E 7,080 |

COMMUNITY DEPENDENCY: Actuating Program 8

BAYAD RENOVATION PROJECT

The Bayad Renovation Project is intended to improve the appearance of the village and provide homes that adequately meet the needs of the people. The striking traditional lines of the village architecture can be retained and, with the application of new roofing, room and sanitation designs, afford greater flexibility and comfort for the residents of the village. Improved transportation routes are needed to implement the movement of people and goods throughout the community. This will be increasingly important as the marketing and industrial activity of the village increases. A plan for beautifying the whole village is crucial to the reconstruction of the community as a whole. Improving the environment of the community will give the villagers a new sense of corporate spirit as well as raise their sense of well-being and set an example of what other community efforts can accomplish.

The Village Renovation Project contains four components. First, the Demonstration House Program will give the villager an idea of the possibilities of modified or total home renovation. The demonstration home will include information and illustration of various aspects of home construction and interior design, including home equipment and furniture. Second, the Residential Modernization Program will take care of the improvement of the existing housing facilities. Standardized improvements for all houses are included in the program. Third, the Road Construction Program will construct hard top roads and essential secondary roads throughout and beyond the village. This will also include constructing roads for heavy transportation of trucks and machinery. Fourth, the Community Remodeling Program will improve the entire village environment with a series of beautification projects. This includes the planting of trees, the painting of murals, the introduction of street names and house numbering.

Implementation of this project will begin immediately with a survey to determine housing improvement needs. A few weeks later, the painting of murals, the naming of streets and the numbering of each house can begin. Streets will be leveled and hardened and secondary roads will be graded and paved. This will be done by the Young Citizens Corps and a team of outside construction engineers. Trees will be planted strategically throughout the village and the demonstration home will be built with modernized facilities adapted to the local situation. This construction will be accomplished by the improvement of existing homes. Cement floors will be poured using two bags for every 12 by 12 foot floor space in every village house where needed. Low interest credit loans for building construction will be worked out with the Bayad Development Corporation.

BHDP

FOUR YEAR PLAN
PROGRAM BUDGETS

Program 8

Plate 5H

BAYAD RENOVATION PROJECT

ICA Consultants

| years | current FY budget | Future Estimated Costs | | |
|-------------------------------|--|------------------------|-----------|-------|
| | | FY II | FY III | FY IV |
| categories | | | | |
| I Capital Costs | Tools | £E 500 | £E 100 | |
| | Truck (four-ton) | (elsewhere) | | |
| | Residential Modernization (100 per house) | 31,500 | | |
| | Model Home | 500 | | |
| | Limestone Blocks | 18,000 | | |
| | subtotal - capital | 50,500 | .100 | |
| II Pay and Allowance | Construction Engineer (for six months) | 1,800 | | |
| | Auxiliary Salary | 4,800 | 4,800 | |
| | Community Workers (20) | 8,400 | 8,400 | |
| | subtotal - pay | 15,000 | 13,200 | |
| III Current Expenses | | | | |
| | | | | |
| | | | | |
| | | | | |
| | subtotal - current | | | |
| Total Program Cost | | £E 65,500 | £E 13,300 | |

BHDP

ICA Consultants

COMMUNITY DEPENDENCY: Actuating Program 9

BAYAD DEVELOPMENT CORPORATION

Effective management, purchasing and marketing on the local community level requires a corporate structure. The Bayad Development Corporation will function as this type of cooperative organization. To release the economic growth potential of the community the corporation will establish local and national outlets as well as global markets for goods produced by the village. The Corporation will also manage the freight service to both Beni Suef and Cairo. Through the Corporation, the villagers will gain access to the latest contemporary machinery and a broader economic base through a cooperative community effort to fully utilize the community's resources. New financial services will assist villagers in making personal savings and capital investments. At the heart of this program is the understanding that Bayad can become a sign of economic self-sufficiency for other villages in Egypt.

The Bayad Development Corporation consists of four components. First, the Agricultural Business Affairs Program will be established to operate a volume marketing service for reduced prices and sales of the products made or grown in Bayad. Also this program will operate a freight delivery system. Second, a Machinery Pool Program will be established to coordinate the use of all equipment, including farm equipment, transportation vehicles and other machinery for industrial use. Third, a Retail Market Program will be initiated so that all the products produced in Bayad and other commodities otherwise unavailable can be sold to people in Bayad and surrounding areas. Fourth, a Savings and Loan Program will be set up in the Corporation which will allow for savings to be invested and for loans to be made for the initial purchase of stock, seed, equipment and operating costs.

The first step in establishing the Bayad Development Corporation will be to organize and charter a legally registered corporation. A maximum number of local individuals who are interested in participating in business and industrial plans for Bayad will demonstrate corporate power by being the first to pool financial resources, even if in a very limited way. A facility will be obtained or constructed on the Village Plaza to contain the retail store. A facility will be obtained or constructed to house community machinery. An experienced businessman will manage the company and train local managers and employees. Supply lines to outside markets will be secured and exporting licenses will be obtained if necessary. Merchandise and produce will be marketed outside and inside Bayad and advertising will be used. Cash grants, long term low interest loans, in-kind equipment and marketing assistance will be developed.

BHDP

FOUR YEAR PLAN

Program 9

Plate 5 I

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BAYAD DEVELOPMENT CORPORATION

| categories | years | current FY budget | Future Estimated Costs | | |
|-------------------------------|---------------------------|-------------------------|------------------------|--------|-------|
| | | | FY II | FY III | FY IV |
| I Capital Costs | Facility Renovation | 600 | | | |
| | Machinery | 2,000 | | | |
| | Freight Lorry | 5,000 | | | |
| | Tractor's (2) | 10,000 | | | |
| | Farm Machinery | 10,000 | 4,000 | | |
| | | | | | |
| Subtotal - capital | | 27,600 | 4,000 | | |
| II Pay and Allowance | Community Staff (10) | 6,000 | 6,000 | | |
| | Accountant (½ time) | 600 | | | |
| | 1 Auxiliary salary | 4,800 | 4,800 | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Subtotal - pay | | 11,400 | 10,800 | | |
| III Current Expense | Rent (5 buildings) | 300 | 300 | | |
| | Fertilizer | 500 | 500 | | |
| | Market Research Materials | 100 | 100 | | |
| | Travel | 300 | 300 | | |
| | Advertisement | 250 | 250 | | |
| | | | | | |
| Subtotal - current | | 1,450 | 1,450 | | |
| Total Program Cost | | 40,450 | 16,250 | | |

COMMUNITY DEPENDENCY: Actuating Program 10

BAYAD VILLAGE PLAZA

The Bayad Village Plaza is designed to totally reconstruct the large unused area in front of Bayad which faces the main road. It will transform this space into a beautiful green and paved village square which will become a very visible and obvious sign identifying Bayad to all visitors. Centuries of village life and building construction have emphasized the need for family space for all residents. The difficult demands for meeting this basic need has left little time for consideration of a large public meeting space for the entire community or places where all the basic community services can be centered. The designing and building of the Plaza will be a cultural event in itself. The great history that is Egypt will be reflected in this twentieth century square, giving the village of Bayad an identity with the past and a relationship to the future.

The Bayad Village Plaza effort consists of four components. First, the Square Modeling Program will design and construct the Village Plaza. It will fit in harmoniously with the existing adjacent buildings. Second, the Cultural Center Program will accentuate the cultural history and traditions of the village. This program will also hold a regular series of community festivals. Third, the Communications Center will provide access to a modern technical communications system such as telephone, radio and eventually television. It will also set up an efficient mail system for regular contact with the world beyond the community. Fourth, the Information Bureau Program will set up an office for effectively disseminating crucial information to every villager in Bayad. This program will also be responsible for village liaison with the government and for receiving visitors to Bayad. The four programs will emphasize the community focus and identity.

The design for the shaping of the square will be started immediately by a team of villagers, auxiliary staff and Egyptian experts. At the same time a celebration timeline will be established by a local cultural committee which will also be responsible for field trips and other tools for imaginal events. Construction of the Plaza will be done by the Young Citizens Corps. A project sign with the village symbol, colorful murals and an attractive outdoor meeting area will be part of the design of the Plaza. A cultural center with rooms for meetings, a library and a cultural committee room will be established. Another building will provide space for the telephone, a radio-television room, a mail room and a reading room. An information office will be set up in the Village Plaza. It will provide plans, posters and regular reports on the Bayad Human Development Project to the village, the Beni Suef Governorate and sponsors of the project.

BHDP

FOUR YEAR PLAN
PROGRAM BUDGETS

Program 10

Plate 5J

ICA Consultants

BAYAD VILLAGE PLAZA

| years | current FY budget | Future Estimated Costs | | | |
|-------------------------------|-----------------------------|------------------------|--------|-------|-------|
| | | FY II | FY III | FY IV | |
| categories | | | | | |
| I Capital Costs | Tree planting | £E 300 | | | |
| | Stone Blocks (5000 sq Mtr) | 1,500 | | | |
| | Printing Press | 1,800 | | | |
| | Building Renovation | 150 | | | |
| | Radio | 20 | | | |
| | Television | 100 | | | |
| | Telephone installation | 50 | £E 36 | £E 36 | £E 36 |
| | subtotal - capital | 3,920 | 36 | 36 | 36 |
| II Pay and Allowance | Architect landscape service | 600 | | | |
| | Community workers (6) | 3,600 | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | subtotal - pay | 4,200 | | | |
| III Current Expenses | Travel (field trips) | 400 | | | |
| | Materials (paper) | 150 | 5 | 50 | 50 |
| | | | | | |
| | | | | | |
| | subtotal - current | 550 | 50 | 50 | 50 |
| Total Program Cost | | £E 8,670 | £E 86 | £E 86 | £E 86 |

BHDP
ICA Consultants

ECONOMIC SUFFICIENCY: Actuating Program 11

DOMESTIC WATER SYSTEM

The Domestic Water System will be a crucial factor in developing a greatly needed fresh water supply to the village of Bayad. Nile River water is now pumped into a four kilometer irrigation canal that runs through the middle of the farm lands presently under cultivation. The main purpose of this canal is for land irrigation. Without a direct source of clean water flowing into the village itself, the village people's only source of drinking and washing water is this irrigation canal. The introduction of fresh water in close proximity to the living quarters of the village will enable the redirection of physical energy which is now expended in long trips for water to the only running source. The interest and enthusiasm of the people towards this project certainly reflects the deep-seated need they experience. The Domestic Water System will be a sign of local people functioning in such a way that they are in charge of shaping community well-being and vitality.

The Domestic Water System will make clean water available for drinking, bathing and washing through four components. First the Domestic Supply Program will drill wells within the village and pump the clean water into a storage tank. This program will also set up a distribution system, making numerous taps in the village available to the residents. Second, the Water Storage Program will have the residents' home water storage units upgraded to prevent contamination prior to consumption. Third, the Sanitation Facilities Program will provide bathing and laundry facilities throughout the village so that the residents will not need to bathe and wash clothes and other household articles in the canal. Fourth, the Sewage Control Program will construct water flushed toilet facilities in conjunction with the sanitation facilities. This program will also have the sewage from these toilets collected into storage tanks for subsequent transfer to village composting sites.

The Domestic Water System will begin immediately with the designs written up during the Consult. A well will be drilled in front of the village and, if needed, other wells will be drilled in strategic locations. Pipe routes will be planned and distribution points decided by the villagers, auxiliary staff and water drilling experts. Pipes, pumps, taps and drains will be obtained and the contractors identified. Leveling and digging of trenches and foundations and laying out of pipes will be done by the Young Citizens Corps. They will connect the system and check for leaks. This Corps will help construct six wash houses in the village, each one containing six laundries and eight showers. Twelve public houses with four toilets and a wash sink will also be built throughout the village. Each of these twelve facilities will contain a covered storage tank with an access hole for pumping.

BHPD

FOUR YEAR PLAN
PROGRAM BUDGETS

Program 11

Plate 5K

DOMESTIC WATER SYSTEM

ICA Consultants

| years | current FY budget | Future Estimated Costs | | | |
|-------------------------------|-------------------------|------------------------|----------|--------|--------|
| | | FY II | FY III | FY IV | |
| categories | | | | | |
| I Capital Costs | Storage Tanks | ££ 3,000 | | | |
| | Toilets (12@450) | 5,400 | | | |
| | Well Drilling Equipment | 2,000 | | | |
| | Motor and Pump | 1,500 | | | |
| | Pipe | 2,000 | | | |
| | Wash Houses (6) | 2,700 | | | |
| | subtotal - capital | 16,600 | | | |
| II Pay and Allowance | Sanitation Engineer | 1,500 | | | |
| | Village Workers (10) | 6,000 | ££ 1,200 | | |
| | Auxiliary | 3,600 | 1,800 | | |
| | | | | | |
| | subtotal - pay | 11,100 | 3,000 | | |
| III Current Expenses | Testing Fees | 200 | | | |
| | Equipment Maintenance | 500 | 500 | 500 | 500 |
| | Cleaning Supplies | 200 | 200 | 200 | 200 |
| | subtotal - current | 900 | 700 | 700 | 700 |
| Total Program Cost | | ££ 28,600 | ££ 3,700 | 5£ 700 | ££ 700 |

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ECONOMIC SUFFICIENCY: Actuating Program 12

DESERT RECLAMATION ENTERPRISE

Bayad has access to thousands of feddans of dry desert land which is potentially arable land that would help increase the current crop yield on the 1400 feddans now being cultivated. With the implementation of water pumps and irrigation systems, the increase in crops would satisfy the now lacking nutritional needs of the village as well as add to the total income with the planting of cash crops. The Desert Reclamation Enterprise will enable the villagers to learn to use modern farming techniques to enhance soil usage and crop rotation methods. As some of the farmers are taught new practices they will be able to share these new-found ideas with fellow villagers as well as residents from surrounding communities. This will contribute positively to the development of economic self-sufficiency in the community.

The Desert Reclamation Enterprise will reclaim presently virgin land surrounding Bayad through four components. First, the Land Preparation Program will involve all the mechanical procedures of earth moving to produce land ready for cultivation. Second, the Irrigation System Program will provide full irrigation equipment, such as pumps and pipes, in order to make development of desert land, farm land and the Nile islands possible. It will also introduce new techniques such as sprinkling systems and drip irrigation in order to minimize water consumption. Third, the Soil Stabilizing Program will develop the high land desert behind the village through the planting of windbreaks and the use of soil stabilizing chemicals and crops. Fourth, the Crop Development Program will institute an efficient crop program in which crops that increase soil fertility will be grown. This program will also introduce cash crops for the economic self-sufficiency of the entire village.

Pumps and accessories will be made available through the repair of existing pumps in the Cooperative of Bayad. High lift pumps for direct pumping from the Nile, pipes, bulldozers, tractors and other required machinery will be obtained in order to prepare and irrigate the high land of the desert. Low lift pumps and machinery will also be obtained to cultivate the low land desert north of Bayad. The islands will be provided with facilities and machinery for preparing the land by means of a series of pumping sets. Accurate soil survey will be done on the whole area to determine the best way of land reclamation, needed implements and the most efficient cropping program. Crops that increase soil fertility, such as legumes will be grown first. High cash crops such as pecans, vegetables and medicinal plants that need low amounts of water will be grown.

BHDP

FOUR YEAR PLAN
PROGRAM BUDGETS

Program 12

Plate 5L

DESERT RECLAMATION ENTERPRISE

ICA Consultants

| categories | years | current FY budget | Future Estimated Costs | | |
|-------------------------------|-----------------------------|-------------------------|------------------------|-----------|-------|
| | | | FY II | FY III | FY IV |
| I Capital Costs | Irrigation System Construct | £E 12,000 | £E 9,000 | £E 6,000 | |
| | Soil Stabilization | 6,000 | 3,000 | 1,500 | |
| | Crop Development | 4,000 | 2,000 | 1,000 | |
| | Mobile Pump | 4,000 | 4,000 | 4,000 | |
| | subtotal - capital | 26,000 | 18,000 | 12,500 | |
| II Pay and Allowance | Community Workers (10) | 4,800 | | | |
| | Auxiliary Salary | 4,000 | 4,000 | | |
| | Consulting Engineer | 600 | | | |
| | subtotal - pay | 9,400 | 4,000 | | |
| III Current Expenses | Fuel | 3,000 | 3,000 | | |
| | | | | | |
| | | | | | |
| | subtotal - current | 3,000 | 3,000 | | |
| Total Program Cost | | £E 38,400 | £E 25,000 | £E 12,500 | |

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ECONOMIC SUFFICIENCY: Actuating Program 13

ESSENTIAL SERVICES NETWORK

The Essential Services Network is designed to link Bayad with the outside world through the construction and provision of the basic services of modern life. During the Consult, the village people have expressed a long awaited desire for electricity. A major part of this program will effectively assist the villagers in realizing that dream. Another deep hope expressed by the Bayad residents was a way to more rapidly travel to Beni Suef and other distant locations. It is clear that the village people want the basic services afforded to other more modernized communities. Their willingness to maintain and extend such a network of essential services will be a sign of cooperative engagement in the reconstruction of the village. Because many of the other programs of the Project depend on such basic services, the Essential Services Network will play a major role in both the economic and social development of Bayad.

The Essential Services Network consists of four components. First, the Community Electrification Program will begin by using a generator to provide public lighting in the Village Plaza and other appropriate places in the village. The system will be coordinated so that it can be connected with the overall plan of the governorate's electricity program when it begins. Second, the Waste Recycling Program will utilize the organic waste for soil enrichment and provide a means to eliminate the inorganic waste. This will work closely with the Sewage Control Program. Third, the Bus Service Program will operate a scheduled transportation system that will allow regular and frequent transport to the ferry boat, other towns and places of industry and agriculture. Fourth, the Maintenance Corps Program will make all electrical and mechanical repairs for all village services.

One diesel generator will be installed immediately for electrical service. The Young Citizens Corps will be a work force that will erect street lamp posts and install electrical wiring at community nodes under the supervision of expert technicians. Finally, wiring will be extended to each house. A waste collection network will be set up and a disposal and receiving plant will be built outside the village. Two minibuses and a motorboat will be procured as the beginning of a larger transportation service in the future. A maintenance corps of six men will be established and the staff will be trained in the techniques of servicing pumps and equipment, in the running of the recycling plant, and in the maintenance and servicing of the electrical and sanitation system. Also, instruction in motor vehicle repairs will be given by a full time employed mechanic who will be in charge of the repair and maintenance workshops.

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FOUR YEAR PLAN
PROGRAM BUDGETS

Program 13

Plate 5M

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ESSENTIAL SERVICES NETWORK

| categories | years | current FY budgets | Future Estimated Costs | | |
|--------------------------------|----------------------------|--------------------------|------------------------|----------|----------|
| | | | FY II | FY III | FY IV |
| I Capital Costs | Diesel Generator | £E 8,000 | | | |
| | Repair Shop | 450 | £E 100 | £E 100 | £E 100 |
| | Tank Construction | 1,000 | | | |
| | Welding Equipment | 5,000 | | | |
| | Tank trucks with pumps (2) | 5,000 | | | |
| | Minibus (2); boat | 9,000 | | | |
| | | | | | |
| | subtotal - capital | 28,450 | 100 | 100 | 100 |
| II Pay and Allowances | Community Salaries (10) | 6,000 | 6,000 | 3,000 | 3,000 |
| | 1 Auxiliary salary | 4,000 | 4,000 | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | subtotal - pay | 10,000 | 10,000 | 3,000 |
| III Current Expenses | Generator Upkeep | 200 | 200 | 200 | 200 |
| | Lamp Posts | 1,000 | | | |
| | Wiring | 1,500 | | | |
| | Fixtures | 1,000 | | | |
| | | | | | |
| | | | | | |
| | | subtotal - current | 3,700 | 200 | 200 |
| | Total Program Costs | £E 42, 150 | £E10,300 | £E 3,300 | £E 3,300 |

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ECONOMIC SUFFICIENCY: Actuating Program 14

BUILDING MATERIALS COMPANY

The village of Bayad is currently situated in a most advantageous position for two main reasons. First, because of the rapid growth of the Egyptian population during the last decade and the allocation of national funds toward other needed areas, Egypt is presently experiencing a heavy lack of building materials for its national construction programs. Secondly, Bayad sits on the edge of a desert that has been for thousands of years a building materials quarry for the ancient pharaohs, the Romans and other civilizations since. Limestone, gypsum and good quality clay still abound in the many miles of desert surrounding the village. The Building Materials Company is designed to take full advantage of such a situation and create a large building industry fully operated and staffed by the villagers. Such an industry will enable the village more rapidly to realize the goal of complete economic self-sufficiency.

The Building Materials Company consists of four components. First, the Brick Making Program will produce large quantities of bricks made from indigenous materials of clay, sand and lime. The products will be designed to meet building industry specifications so that the demand created by the expanding national need can be met. Second, the Stone Quarry Program will utilize the beds of lime and stone that lie around the village. It will also expand the currently operating stone quarry. The Lime Kilm Program will provide a place to process lime more effectively than the ancient kiln, and therefore will become an exportable product for Bayad. This kiln will also be available for pottery firings. Fourth, the Gypsum Mining Program will begin to utilize the natural supply of gypsum which is located 20 kilometers from Bayad. This supply will provide the basic ingredients in making plaster products.

To implement the Building Materials Company, permission from the Governorate of Beni Suef will be obtained for industrial use of the land area southeast of Bayad. Test samples of the clay in this area will be taken immediately to discover the best mixture for brick making. A large kiln for baking bricks and a brick pressing operation for non-fired bricks will be constructed. Large well-built cutting machinery and proper safety equipment will be purchased for expanding the present stone quarry operations. The owner of the lime kiln will be contacted about relocating and rebuilding a huge lime-kiln also in the southeast desert. The huge area of gypsum which lies 20 km. out in the desert will be mined. A trucking system will be set up to export large quantities of bricks, limestone, packaged lime and gypsum to Cairo and other markets.

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Program 14

Plate 5N

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FOUR YEAR PLAN
PROGRAM BUDGETS

BUILDING MATERIALS COMPANY

| categories | years | current FY budget | Future Estimated Costs | | |
|-------------------------------|-------------------------|-------------------------|------------------------|--------|-------|
| | | | FY II | FY III | FY IV |
| I Capital Costs | Water Installations | ££ 500 | | | |
| | Lime Kilns | 500 | | | |
| | Brick Slab Molds | 200 | ££ 100 | | |
| | Quarry Equipment | 7,000 | 200 | | |
| | Prefab Construction | 1,500 | | | |
| | Mining Equipment | 2,000 | 200 | | |
| | Freight Truck | 5,000 | | | |
| | subtotal - capital | 16,700 | 500 | | |
| II Pay and Allowance | Community Salaries (20) | 12,000 | 6,000 | | |
| | Tradesmen (4) | 4,800 | 2,400 | | |
| | Auxiliary salary | 4,000 | 2,000 | | |
| | | | | | |
| | | | | | |
| | | subtotal - pay | 20,800 | 10,400 | |
| III Current Expenses | Fuel | 600 | 600 | | |
| | Cement | 1,000 | 1,000 | | |
| | Freight | 400 | 400 | | |
| | Soil Tests | 200 | 50 | | |
| | Lumber | 1,000 | | | |
| | Tools | 200 | 150 | | |
| | Supplies | 150 | 150 | | |
| | Maintenance | 400 | 400 | | |
| | subtotal - current | 3,950 | 2,750 | | |
| Total Program Costs | | ££41,450 | ££13,650 | | |

ECONOMIC SUFFICIENCY: Actuating Program 15

SMALL INDUSTRY DEVELOPMENT

Essential to any community in need of development is some means of increased employment for the community at large and specifically for village people not previously employed in gainful occupations. The Small Industry Development is a program delineated to enable those Bayad residents who have or can develop the necessary skills with part time or full time employment in a series of small village industries. A number of the villagers possess traditional skills such as hand weaving and pottery making, while others are experienced in raising small animals. The available teaching skills of the people will be used to develop latent talent in others, in order to expand local ability for the sake of creating a broad economic base for the whole community. The Small Industry Development Program will awaken the whole village to the possibility of more remunerative employment for all.

The Small Industry Development will function through four components. First, the Clay Products Program will revitalize the potters trade on the East Bank of the Nile. This program will employ and train people to create both ancient and modern designs of Egyptian pottery. It will also create clay products for large technological companies. Second, the Weaving Manufacture Program will actualize already existing possibilities of craftsmanship and stimulate home work. This will give women a way of contributing to the household income. Third, the Poultry Production Program will stimulate the high quality production of poultry for the wider outside market. Fourth, the Food Processing Program will use crops locally grown. It will process and package various foods including soybeans, peanuts, sesame seeds and fish.

The first step in beginning the Small Industry Development will be to acquire the necessary clay and pottery equipment. A Beni Suef teacher has offered to help teach local people to make pots and other clay products. Looms, materials and designs will be acquired and weaving lessons begun. Women, once skilled in the use of weaving looms, will begin home industry production of finished products. A chicken complex will be constructed outside the village on the desert side. Incubation equipment and healthy chicks will be acquired. The veterinary service will supervise the project and train local youth in animal health. The Food Processing Program will begin by setting up simple processing operations for various crop and fish products. Space will be made available in the northeast desert industrial area.

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FOUR YEAR PLAN
PROGRAM BUDGETS

Program 15

Plate 50

SMALL INDUSTRY DEVELOPMENT

ICA Consultants

| categories | years | current FY budget | Future Estimated Costs | | |
|-------------------------------|---------------------------|-------------------------|------------------------|--------|-------|
| | | | FY II | FY III | FY IV |
| I Capital Costs | Wheels and Molds | £E 400 | £E 100 | | |
| | Looms (6) | 300 | | | |
| | Poultry Battery | 10,000 | | | |
| | Chicks (500) | 200 | 100 | | |
| | Cereal Mill | 200 | | | |
| | Packaging Plants | 450 | | | |
| | subtotal - capital | | 11,550 | .200 | |
| II Pay and Allowance | Community Workers (10) | 4,800 | 2,400 | | |
| | Artisans (3) | 1,800 | 900 | | |
| | Auxiliary | 2,400 | 1,200 | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | subtotal - pay | | 9,000 | 4,500 | |
| III Current Expenses | Packaging Materials | 200 | 100 | | |
| | Weaving Materials | 100 | 50 | | |
| | Clay | 100 | 50 | | |
| | Chicken Feed | 500 | 250 | | |
| | Veterinarian Medicines | 100 | 100 | | |
| | | | | | |
| | subtotal - current | | 1,000 | 550 | |
| Total Program Costs | | £E 21,550 | £E 5,250 | | |

ECONOMIC SUFFICIENCY: Actuating Program 16

INTENSIVE AGRICULTURAL PRODUCTION

Agricultural cultivation of the rich Nile valley over thousands of years has given the Egyptian farmers a wealth of traditional experience in farming methods. Modern farming techniques for faster and more productive use of crop raising has reached the ears and minds of the farming community of Bayad. Intensive Agricultural Production is geared to answer the request for more training and upgrading of farming techniques. One important arena is a more efficient way to use the present irrigation canal that runs between the currently cultivated lands near the Nile. Also the use of modern and adaptable tools will increase present crop yields and help broaden the growing of newer kinds of cash crops. Watching their feddans yielding richer and more abundant harvests will engender a sense of satisfaction in standing as Egyptian farmers.

The Intensive Agricultural Production effort has four components. First the Canal Renovation Program will raise the water level of the irrigation canal. This program will increase the quantity and accessibility of water to the lands now under cultivation. Second, the Efficient Irrigation Program will introduce an improved method of irrigation through the use of polyethylene tubes. This system will avoid cutting the banks of the irrigation canal and will help in controlling the amount of water supplied. Third, the Crop Improvement Program will introduce new and applicable technology, superior seeds of adapted varieties and new cash crops. It will also encourage row planting and furrow irrigation. Fourth, the Improved Implements Program will introduce methods of improving presently used farm implements for more effective use of cultivated land and will also begin an adaptive method of using farm machinery for necessary land use.

In order to begin the program of Intensive Agricultural Production the section of the irrigation canal running through the Bayad farmlands will be cleared of mud deposits and weeds by the Young Citizens' Corps. Stone weirs will be installed at appropriate locations in the canal in order to raise the water level and service more land. Syphon irrigation will be tried on an experimental plot first and other lands will be developed later. Syphon material will be cut from long rolls of plastic piping in desired lengths. New varieties of seeds for feed and the planting of cash crops will be procured and set in once land is designated. Machinery for all farm equipment will be obtained and made available through the Bayad Development Corporation which will also rent major machinery at low rates.

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FOUR YEAR PLAN
PROGRAM BUDGETS

Program 16

Plate 5P

INTENSIVE
AGRICULTURAL PRODUCTION

ICA Consultants

| years | current FY budget | Future Estimated Costs | | |
|---|--|------------------------|---------------|-------|
| | | FY II | FY III | FY IV |
| categories | | | | |
| I Capital Costs | Sprinkling Irrigation | £E 15,000 | £E 15,000 | |
| | Irrigation Pump | 750 | | |
| | Polyethelene Tubes | 200 | 100 | |
| | Hand Tools | 100 | 50 | |
| | Tractors 2) | 10,000 | | |
| | Canal Cleaning & building stone weirs | 2,000 | | |
| | subtotal - capital | 28,050 | 15,150 | |
| II Pay and Allowance | Community Workers (10) | 3,000 | 1,000 | |
| | Land Surveyor | 500 | | |
| | Auxiliary | 4,000 | 1,500 | |
| | | | | |
| | | | | |
| subtotal - pay | 7,500 | 2,500 | | |
| III Current Expenses | Seed Varieties | 200 | 200 | |
| | Grapevines | 200 | | |
| | Fertilizers | 100 | 100 | |
| | | | | |
| subtotal - current | 500 | 300 | | |
| Total Program Cost | £E 36,050 | £E 17,950 | | |

ECONOMIC SUFFICIENCY: Actuating Program 17

LIVESTOCK RAISING COMBINE

The Livestock Raising Combine is a program designed to offer broader and more productive uses of animal husbandry and fishing. Many of the larger animals in the Bayad farming community play the three traditional roles of supplying work, milk and meat. The introduction of raising animals and fish for market production is a crucial need in Bayad in order to give the local farmers a wider economic base. The wide range of already present varieties of animals and the large quantity of tilapia and other fish in the Nile make such a project very feasible. The stocking of the unused village pond with Nile River Tilapia, initiating a fish farm experiment, has already captured the imagination and excitement of the village people. A community that finds effective methods of using its available resources more profitably is a signal community demonstrating improved local self support.

The livestock Raising Combine is comprised of four components. First, the Cattle Breeding Program will make additional high protein beef products available for the local market. This program will also establish and intensify the cattle-fattening program and selective breeding. Second, the Small Animal Program will encourage the breeding of smaller livestock such as rabbits and poultry. Bee raising will also be a part of this program. Controlled supervision of these projects will provide more products for sale in outside markets. Third, the Fish Farming Program will provide a demonstration and experimental fish farm as well as new employment opportunities. Fourth, the Animal Feed Program will care for the quality of animal feed, with special attention given to eliminating toxic content. It will also upgrade general feeding patterns by making available government subsidized feeds, such as cottonseed cake.

The Livestock Raising Program will begin with using the veterinary clinic services to promote the breeding of the most suitable types of cattle for this area. It will also set up an experimental animal pen for ten large animals outside the village near the desert. In the Small Animals Program battery sheds for keeping poultry, rabbits and other small animals will be built. A village apiary will be established using modern methods of bee keeping. The fish pond experiment in front of the village plaza will be a six month demonstration. Later, small shallow fish ponds will be dug in the village for fish farming. Experiments with cage fishing will be in operation for a large fishing industry in the island channel and between the stone weirs in the canal. Within six months, village plots will be planted with animal feed crops and a marketing system to import other animal feeds will be set up.

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FOUR YEAR PLAN
PROGRAM BUDGETS

Program 17

Plate 5Q

LIVESTOCK RAISING COMBINE

ICA Consultants

| years | current FY budget | Future Estimated Costs | | |
|-------------------------------|--------------------------|------------------------|----------|-------|
| | | FY II | FY III | FY IV |
| categories | | | | |
| I Capital Costs | Pens & Covered Stockyard | ££ 500 | | |
| | Water Tanks, Troughs | 600 | | |
| | Hutches, | 700 | | |
| | Equipment | 1,000 | | |
| | | | | |
| | | | | |
| subtotal - capital | | 2,800 | | |
| II Pay and Allowance | Breeding Consultant | 500 | | |
| | Community Workers (10) | 3,000 | ££ 1,000 | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| subtotal - pay | | 3,500 | 1,000 | |
| III Current Expenses | Vet Supplies | 90 | 90 | |
| | Construction Supplies | 100 | | |
| | Feed Storage | 100 | 100 | |
| | A. I. Serum | 100 | 100 | |
| | Fish Cages | 100 | 25 | |
| | Rabbits | 40 | 40 | |
| | Feed | 300 | 300 | |
| | | | | |
| subtotal - current | | 830 | 655 | |
| Total Program Cost | | ££ 7,130 | ££ 1,655 | |

EPILOGUE

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I

ACTUATION PHASING

METHODS

Although the methods of the Social Demonstration Consult are universally applicable, the particular situations in which they are employed are always unique. The clues to the uniqueness of Bayad are found in the five comprehensive charts and the accompanying discussion which comprise the substances of this document. These charts, which hold the Operating Vision, the Underlying Contradictions, the Practical Proposals, the Tactical Systems and the Actuating Programs, together reflect the flow of the Consultation.

FINDINGS

The Operating Vision of the people of Bayad as discerned during the Consultation, indicated four broad arenas of concern: physical development, economic development, functional training and social well-being. The emphases were on physical and economic development which involve upgrading health and housing, providing essential services, expanding the agricultural base, and ensuring commercial industry and effective marketing methods. Surrounding emphases indicated concern for providing relevant, functional training for all ages, creating structures for significant community work and celebrational activities. The following day's work of discerning the contradictions underlying these concerns revealed a strong emphasis on the depletion of village initiative. Closely related but distinct was the undeveloped potential of raw, technological and human resources. A similar impeding issue was the limited availability of practical education, information and technical methods. Other important issues were also uncovered which pertained to minimal community activities, strained sources of capital and disrupted community health. The proposal work which followed used a broad approach to providing practical training and village extension in order to build community initiative. An equivalent proposal thrust was aimed at environmental facilities and community housing to overcome the underdeveloped potential of basic resources. The third major thrust of the proposals is toward industrial development and local commerce while the fourth set is concerned with social engagement and village cooperation. The set of proposals at the center of the Proposals Chart pushes in the direction of expanded agricultural production. The Tactical Systems Chart underscores the need to expand the fundamental economic base, with tactics in both business development and agricultural production. Social

forms need to be provided in order that cultural extension can be promoted and local organizing can be catalyzed. Basic village structures will provide village construction systems and essential services will assure public utilities and equipment in addition to health care. Functional learning tools will advance local skills and community education will broaden and empower formal schooling. Supportive project relations will facilitate all other tactics. The Actuating Programs Chart indicates a major concern for the systematic reconstruction of social well-being, community dependency and local economic sufficiency. In the arena of social well-being, the emphasis is toward building a complete health service and a system of total functional education. In the arena of community dependency, the focus is toward renovating housing, encouraging and aiding business development and creating a community plaza. In the arena of economic self-sufficiency, the emphasis is on providing and extending essential services, creating new businesses and improving and expanding agriculture.

PHASES

The Human Development Project model produced during the Consult represents the decisions of Bayad al Arab to initiate development efforts. The Actuating Programs assume a broad four-year phasing model for the completion of the Bayad Project (Plate 5A). The emphasis of the first year is on initiating the project by launching the 17 programs and training the core of community leaders who will guide and direct the project expansion. The second year will bring an acceleration and expansion of the project programs. Particular importance, therefore, is given to training a wide range of leaders equipped to guide the direction of expansion. The third year will focus on establishing the local autonomy of the project. As local leaders assume greater responsibility for the total operation, the auxiliary staff will be decreased. The fourth year will witness the maturation of the project. External assistance will be considerably reduced and local initiative will be maximized in both the economic and social development programs.

II

PROJECT FINANCING

FUNDING

A comprehensive funding scheme is required for social demonstration. A project in a rural village requires direct assistance from both public and private sources in the form of grants, long-term loans at favorable rates, lines of credit and in-kind contributions of goods, services and personnel. While the village must move as quickly as possible to assume responsibility for the cost of development, outside financial leverage is necessary to break through the self-defeating cycle of a subsistence economy. It

is, therefore crucial both to bring such external resources immediately to the services of the community, and to maintain them only for the period of time necessary for generating local economic activity.

COSTS

The 17 Actuating Programs provide the means for an initial analysis of the Project cost as well as the broad funding patterns. Plate 6 shows the estimated cost of the first year of each program broken down into capital expenses, salaries and operating expenses. Plate 6A provides a picture of the projected four-year costs. It is anticipated that at the end of the third year, outside support of the Project itself would not be necessary. The major component of the first year budget at 52% is for capital costs to undergird the economic development and provide a rapid expansion of essential services particularly in health-related programs. It is anticipated that the village income will increase by 4.5 times in the first year. This increase would come from salaries paid to the local people for direct project work. Over the four years a decreasing amount of direct funding will be needed to support salaries as programs begin to generate their own incomes. Plate 6B illustrates the principal of economic self-sufficiency as the flow of outside funding decreases and the village capital increases. This move requires a total comprehensive development approach. Through the intensification of agriculture, the introduction and expansion of village industries and the provision of essential services within the community, a stable economic base will be established which will help maintain the Project's efforts in the future.

III

IMPLEMENTING FORCES

GUILDS

The 17 Programs provide the framework for local participation and give direction to the necessary organization of the community residents who will do the work of implementation. Those of all ages who participate could form a series of working groups, a modern form of the ancient guilds. These groups could then subdivide into task forces to do particular jobs related to varied aspects of program implementation. Through the guild structure, these citizens could also do continuing planning and evaluation.

COMMISSIONS

This organizational format would provide the structure through which the entire community could participate in decision making about the future of the village. The programs of the Bayad Human Development Project could be grouped in relation to two commissions responsible for coordinating the unified focus of the project. One commission could deal primarily with social development, the other more with the economic. Such commissions, comprised of the guild

and other community citizens, would include both men and women, youth and elders, so that there would be a representational cross-section of the village. Cooperation on such a broad basis is vital to the success of effective village development. The commissions would also need to have participation from the auxiliary staff and the Guardians, who would catalyze and support the project.

GUARDIANS

The Guardian and Patron networks assure the continuance of external support to the Bayad Human Development Project. Such a supportive network would allow for the participation and assistance of governmental agencies as well as the establishment of relationships with private sector forces across the nation and the world. In addition to funding, outside support would include information sources, advocacy and access to services and expertise not presently available within the community. These networks will be invaluable to Bayad al Arab.

AUXILIARY

Finally, the Actuating Programs indicate the form of the catalytic force, referred to here as the auxiliary. One of the indices of a dynamic human development project is the presence of a catalytic body that brings dedication and methodological expertise to the task at hand. Functionally, this group engenders motivity in the community at large and continually seeds its imagination, thus enriching and focusing its understanding of the development task. It also provides ongoing training, most of which goes on informally as people work shoulder to shoulder on a common task. Such training makes possible the continual emergence of new leadership. The presence of such a body whose membership is international as well as Egyptian, provides a continual freshness of perspective which enables the community to grasp its task in a creative fashion. When this perspective is placed in dynamic relation to the intimate knowledge of the community and the practical wisdom of long-time residents, a reservoir of effective energy emerges. In Bayad today, such a force of people needs to include farmers, basic education specialists, health personnel, nutritionists and industrial developers. Also needed are landscape architects, construction engineers, bilingual teachers in Arabic and English and business management specialists. Each member of the auxiliary will be charged with the responsibility of equipping one or more understudies in his area of expertise. These understudies, in turn, will then be prepared to assume leadership responsibilities within the community.

IV

ANTICIPATED BENEFITS

ANTICIPATIONS

Since Bayad is intended to be a showpiece which will serve as a pilot illustration of possibility for similar locations, it is important that an imaginal picture of the anticipated benefits of the project be spelled out. Rather than state in abstractions the objectives of the model village, it will be more valuable to try to describe what a traveler will see on his journey to the village in six months time. The hundreds of things the visitor might see are organized into eight arenas.

PLAZA

Probably the first introduction for a visitor to the Bayad Project will be the swift ride across the Nile in the Project's new motorboat. He then follows the people up a short walk to a waiting minibus. This is also part of Bayad's new transportation service. The short one kilometer ride is covered quickly. As he steps out on onto the newly constructed village Plaza, he is greeted by a member of the Ambassador's Guild and is officially welcomed to the Project. He is then told that the fast growing castor bean trees lining the Plaza, the stone pavement and the large pond have just been finished by a group of village youth called the Young Citizen's Corps. He is then led past a large banner inviting all visitors to the Bayad Human Development Project. In another part of the Plaza he sees people gathered around the new market which is stocked with meat, canned goods, cloth and other staples. He enters the nearby Cultural Center where local people gather for large meetings and community festivals. He is shown through the building and visits the Information Bureau where he is handed the latest copy of the village newspaper. Entering the new communications office, he sees a few villagers buying stamps at the post office, while off to the side one of the women is using the public telephone. Another group of people walk by and enter the small T.V. and reading room for their afternoon relaxation. Before leaving the Plaza, he visits another building, housing the Bayad Development Corporation. Here he finds some village men energetically talking across a desk covered with accounting charts, lists of many Egyptian and foreign companies and schedules for freight delivery of Bayad products.

The visitor is then taken to the Primary School just off the Plaza. As he approaches the school he notices that a new room has been added recently. His guide explains to him that this is the new preparatory class that has opened this season. Entering the school, the visitor is impressed with the variety of maps and pictures on the walls. He can hear students singing in one class and in another the teacher writes first in Arabic, then in English. Continuing on up East Bank

TRAINING

Avenue to the Early Learning Center, he stops for a moment to talk to a preschool teacher. Upon discovering that she is a village mother, he is surprised to learn that her own formal education has been minimal. She has recently attended special classes that have trained her for classroom teaching. She tells him that the fine bright uniforms that the children wear were sewn by the Women's Activity Society. In the school kitchen three women are being taught how to plan and cook nutritious meals. They attend classes in the evening to learn not only nutrition but many other homemaking skills. Outside the school the visitor gets a chance to meet other women who have learned skills in making fine arts and crafts. They are also teaching other women in their homes these same skills. As he walks from house to house, the visitor stops at one of the apprenticeship shops. He is impressed with the fine new tools being used in the mechanic's shed and watches the confidence of the teacher as he moves from one eager student to another.

SERVICES

The visitor notices a series of freshly dug holes along every street. These are for the electric light poles. He is told by his guide that a complete village electrification system will soon be connected with the large generator and the lighting in the Plaza. His attention is caught by small groups of women surrounding the water taps at different parts of the village. They chat together as they fill their large clay jars and walk briskly into their homes, gracefully balancing the jars on their heads. They are happy because the new fresh water system supplies them with clean water directly from a deep drilled well. This means no more long trips across fields to the irrigation canal. He is amazed at the energy of the children playing in the recreational areas. His guide informs him that a more robust health is experienced by everyone in the village because of the introduction of clean water and more nutritious foods from the community garden. Since the community oven was built, many village mothers have been given instruction in different ways to bake nourishing meals. He remembers that some of the mothers cook for the hundreds of children in the daily school meals program and for the many adults in the evening classes. He is informed that serious illnesses and Bilharziasis are now kept in check through daily visits and instructions from the Health Clinic nursing team. The Health Clinic has just set up its specialist center with a dentist, optometrist and pediatrician. The visitor quickly steps out of the way of the sanitation truck driving to one of the nearby sanitary facilities. There it will pump out the sewage, and along with other village refuse, take it to the compost pile outside of the village.

As the visitor continues his journey through the village, he is impressed with the finely cut stone that paves the street. He stops for a moment to watch a group of villagers beginning to grade and pave another street. A man passes with a wheelbarrow full of cement and the visitor follows to see where he is going. The villager enters a home where he and several other men are pouring a cement floor.

CONSTRUCTION

For the first time the visitor notices that each house has a number and the family's name plaque by the door. There are other homes that are being expanded and improved with the use of brick and limestone from the industry that is fast becoming the pride of the village. Several men are working on a model home and they tell about the architect who comes to the village twice a week to help them with the design and materials. One of their most exciting tasks is deciding where the electrical wiring will go. The model home is already surrounded by shrubs and trees and each day many of the village children come to watch and wonder at this fine new building.

HUSBANDRY

The guide then takes the visitor across the main road in front of the village where he is astonished to see local fishermen actually feeding the fish in the tilapia pond. The amazing number of fish, one of the fishermen tells him, has multiplied from the original forty Nile River fingerlings put there six months before. He then walks down a neatly planted row of flourishing sesame plants. One of the farmers explains that this is a demonstration farm using the latest row cropping techniques and syphon irrigation. He is taken to the irrigation canal where he sees farmers using plastic tubes to syphon the water into recently dug rows for planting. Looking into the canal he notices stone weirs placed at wide intervals to maintain a high water level. A group of fishermen are transferring fish into the water between the weirs. This is the first expansion of the village fish industry. He is intrigued by the low hum coming from the direction of the Nile. In answer to his question, he is taken down the road to the low desert land. There he is astonished to see a large green vegetable garden growing in the middle of the desert. This land is owned and farmed by the whole community. The sound that he heard previously was the water pumps bringing Nile water up through long pipes onto the reclaimed desert land. Further along he comes to the high desert behind the village and sees to his amazement an extensively watered garden of various kinds of cash crops. He sees two men walking together in the distance and is told that they are the veterinarians returning to their clinic. They have just inoculated the animals in the new stockyard.

INDUSTRY

After a further walk across the high desert behind the village, the visitor sees the village stockyards. One is used for water buffaloes, cows, donkeys and other large animals. Next to the compost pile is a smaller stockyard of young calves being raised for market in the cattle-fattening project. He then passes long rows of sheds where the small animal project provides meat and egg producing chickens, rabbits and domesticated bees. His interest is caught by a group of stone houses further out in the desert. Here he finds neatly piled stacks of squarely cut limestone and bricks. Inside one of the houses he sees the brick kiln and the brick pressing machine. He sees a large truck coming from the desert 20 kilometers away carrying gypsum to the plaster processing plant. From another of the buildings he hears the sound of the limestone mill. He is astounded at the extent of the Building Materials Company and the

trucks loaded with building materials ready for Egyptian markets. Returning to the village, he stops at one of the houses where he visits a group of women busily weaving rugs, hats and finished cloth products on mechanized looms. He is told that there are also small food processing plants for soy beans, sesame seeds, peanuts and other crops in the village. In another house he watches a small group of men and women creating pottery with unique Bayad designs.

The sun sets rapidly in the early evening as the visitor ends his tour with a final stop at the Village Plaza. He is surprised to find the area already lighted. Farmers return from the fields and crowd into the square. Local representatives of the Village Council men, women and children of all ages begin to arrive at the Cultural Center where hot strong tea is served in small glasses. An instrumental group is playing traditional music. The meeting begins with the singing of songs about Bayad. Guild leaders report on the accomplishments and difficulties experienced during the week in agriculture, commerce, industry, construction, health services and education. Neighborhood leaders report on housing expansion, the present state of installation of water and electricity, road cleaning and grading projects. Plans are made for the coming week, and the next work projects to be undertaken. A discussion is held about the changes needed in the community market now that more crafts and produce are available and villagers are coming from the surrounding areas to shop in Bayad. The meeting moves with lively debate and comments by people of all ages. Then the villagers begin to move down the roads to their homes while some remain behind to mill about and enjoy each other's company.

Later when the visitor reflects on his journey, he will realize that what impacted him most was the people themselves. He will remember their vitality, hard work and dignity. When he recalls the spirit of corporateness in the way they worked together and the hospitality with which he was received, he will sense that something profound has happened to these people. Their excitement about what they are doing will begin to infect his own spirit. He understands himself to have been fully welcomed to the community. What he found on the edge of the Egyptian desert in a formerly isolated community will make him wonder: "If Bayad Al Arab can do this, why cannot every village throughout Egypt and the world?"

V

REPLICATION SCHEMES

The Bayad Human Development Project is a pilot project in the socio-economic development of a rural community. Local replication of the project would involve several steps. One would be the systematic

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LOCAL

sharing of the Project in other communities through speaking engagements by local project staff. Visitation programs would be devised whereby leaders and residents of other communities would visit Bayad. One-day local community meetings would also be held. People from other communities, interested in replication would be invited to attend as a step in exploring ways to move in their respective communities. Concerned leadership would be trained in project methods in a Social Methods Institute. Finally, a consult similar to the one held in Bayad would be initiated in these communities in consultation with the ICA and Bayad al Arab residents.

NATIONAL

A nationwide replication effort of the Human Development model would be of signal value for the communities of any country. It would provide concrete and constructive form for the movement toward local responsibility and the cry for local social transformation. Replication could benefit a nation as a whole in a number of ways. It could demonstrate a viable approach to socio-economic revitalization of the rural community. It could be a model for creatively recovering community space, providing adequate housing for all residents and engaging every citizen in community decision-making. It could demonstrate an approach to community education which empowers every citizen's social participation. Finally, a Human Development Project is a demonstration of the recovery of community as a human environment. Practical replication steps would require an effort similar to that described in the preceding paragraph on local replication. It would be necessary to involve local people and solicit the support of the public and private sectors at all levels. The work of the ICA over the years in 24 nations has built a foundation of support and responsiveness which would greatly facilitate the move to replication. It is conceivable that the first replication of the model could be accomplished next year in other rural areas of Egypt.

PERSONNEL

The replication of this Project raises further issues about the necessary catalytic staff and the community training involved. The number of catalytic staff members needed for replication would be proportionately lower than that of the pilot project. Creating a network of model communities across Egypt would require a staff of ten people for each community for a period of two or more years. This staff would live and work with the people of the community sharing with them a variety of skills. The staff as a unit would encompass a range of expertise, but more important than this would be the deep concern of each staff member for the renewal of community life. Such core groups could be made up of people from both the public and private sectors. They could be people from across the nation, possibly including university students whose degree requirements incorporate a year of field placement. The ICA is prepared to provide practical training institutes in comprehensive

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community development methods for such local replication forces. These training institutes would be at least one month in length and accommodate 50 - 60 trainees. Classroom work would be involved, but most of the time would be used for practical field training in the pilot project and local replication experiments.

FINANCING

Through an operating Human Development Project, the ICA could provide training resources for replication in other locations throughout Egypt at minimal costs. The program budgets for each replication project would be built on the basis of local necessity and could be supported to a large degree by allocated funds made available through the normal broad-based channels of public and private support as well as long-range public and private loans. Local people in each situation could participate directly through contributions of time and effort as well as direct cash contributions. The possible sources of direct economic support both within the outside the community would be greatly expanded by the successful accomplishment of the Human Development Project in progress.

VI

SUPPORT SYSTEMS

SELECTION

During the past year the Institute of Cultural Affairs surveyed rural villages and urban neighborhoods in Upper Egypt in anticipation of establishing a pilot Human Development Project in the Arab Republic of Egypt. The village of Bayad al Arab was finally chosen for several reasons. First, although it is a rural community, it is located close enough to the City of Cairo to be accessible to visitors who wish to see rural Egypt coming alive. Second, it is dramatically in need of socio-economic development. Third, both the public and private sectors have indicated a keen interest in cooperating with such a rural development effort. Fourth the village's location on the East Bank of the Nile River is reminiscent of Egypt's long history and symbolizes the growing trend toward upsurge. Fifth, and perhaps most important, the local residents and their community leaders are ready to move immediately towards the socio-economic development of Bayad al Arab.

STAFF

The Institute of Cultural Affairs is ready to provide the consultant services necessary to support the work of the Bayad Human Development Project in the coming year. This means assigning staff to serve as the project auxiliary. The skill and experience of the auxiliary will be intensified by a systematic interchange of information with staff and local participants in Human Development Projects across the world. Assigned staff will live in Bayad and work full time in the project. The expenses of the staff have been written into the

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various programs in which they will be directly involved.

SUPPORT

The ICA stands ready to assist community leadership in procuring cash or in-kind contributions for program enablement. By working with the Guardian network, local residents and auxiliary personnel will be in a position to seek support from both the public and private sectors. The funding objective for the coming year will be to develop a base of support for Bayad through the gifts and grants of corporations, agencies, foundations and interested individuals. At this point in its history, it is necessary for the Project to depend on outside funding. Over the long term, however, the Project will be recreating the financial foundations of the community and lessening its dependence upon external funds.

DIRECTION

By July, 1977, twenty-four Human Development Projects will have been launched globally. During the past twelve months, eight projects were established in Australia, India, Kenya, the Marshall Islands, the Republic of the Philippines, the Republic of Korea, the United Kingdom and the United States. The Bayad Human Development Project is the third of sixteen to be initiated this year and follows Indonesia and Germany. The ICA anticipates that the Bayad Project will be of service to the Arab Republic of Egypt as one of the many signs already present in this nation that local community is being renewed by local man.

BUDGET SUMMARY CHART
First Fiscal Year

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Key: 1.0=EE 1000

| Programs | Breakdown Capital Costs | Salaries | | | Operating Expenses | | Total |
|--------------------------------------|-------------------------------|----------|--------|------|-----------------------|--------|--------|
| | | Local | Auxil. | Fees | Exp. | Travel | |
| 1 Complete Health Clinic | .93 | 2.64 | 4.00 | .6 | 57.3 | - | 65.17 |
| 2 Unified Nutrition Service | 10.10 | 4.50 | 4.00 | .6 | 1.65 | .30 | 21.15 |
| 3 Total Functional Education | 2.90 | 1.20 | - | 1.5 | 1.25 | 2.00 | 8.85 |
| 4 Informal Schooling Institute | 7.95 | 2.52 | 3.00 | - | .70 | 1.00 | 15.17 |
| 5 Women's Activity Society | 2.47 | .60 | - | - | .50 | - | 3.57 |
| 6 Young Citizens Corps | 6.50 | 8.52 | - | - | .24 | - | 15.26 |
| 7 Early Learning Center | 4.60 | 6.60 | 4.00 | - | .18 | - | 15.38 |
| 8 Bayad Renovation Project | 50.50 | 8.40 | 4.00 | 1.80 | - | - | 65.50 |
| 9 Bayad Development Corporation | 27.60 | 6.00 | 4.80 | .60 | 1.15 | .30 | 40.45 |
| 10 Bayad Village Plaza | 3.92 | 3.60 | - | .60 | .15 | .40 | 8.37 |
| 11 Domestic Water System | 16.60 | 6.00 | 3.60 | 1.50 | .90 | - | 28.60 |
| 12 Desert Reclamation Enterprise | 26.00 | 4.80 | 4.00 | .60 | 3.00 | - | 38.40 |
| 13 Essential Services Network | 28.45 | 6.00 | 4.00 | - | 3.70 | - | 42.15 |
| 14 Building Materials Company | 16.70 | 16.80 | 4.00 | - | 3.95 | - | 41.45 |
| 15 Small Industries Development | 11.55 | 6.60 | 2.40 | - | 1.00 | - | 21.55 |
| 16 Intensive Agricultural Production | 28.05 | 3.00 | 4.00 | .50 | .50 | - | 36.05 |
| 17 Livestock Raising Combine | 2.80 | 3.00 | - | .50 | .83 | - | 7.13 |
| Total | 247.62 | 90.78 | 46.60 | 8.80 | 77.00 | 4.00 | 474.20 |

PROJECTED COSTS
over four years

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Plate 6B

| years programs | I | II | III | IV | Total Cost |
|--------------------------------------|------------|------------|-----------|-----------|---------------|
| | FY 1976 | FY 1977 | FY 1978 | FY 1979 | |
| 1 Complete Health Clinic | £E 65,170 | £E 20,046 | £E 15,440 | £E 10,086 | £E 110,742 |
| 2 Unified Nutrition Service | 21,150 | 11,300 | 6,700 | 6,700 | 45,850 |
| 3 Total Functional Education | 8,850 | 5,750 | 4,550 | 4,100 | 23,250 |
| 4 Informal Schooling Institute | 15,170 | 7,420 | 4,420 | 4,420 | 31,430 |
| 5 Women's Activity Society | 3,570 | 1,125 | 1,125 | 1,125 | 16,945 |
| 6 Young Citizens Corps | 15,260 | 8,760 | 5,460 | 5,460 | 34,940 |
| 7 Early Learning Center | 15,380 | 11,280 | 7,180 | 7,080 | 40,920 |
| 8 Bayad Renovation Project | 65,500 | 13,300 | - | - | 78,800 |
| 9 Bayad Development Corporation | 40,450 | 16,250 | - | - | 56,700 |
| 10 Bayad Village Plaza | 8,370 | 86 | 86 | 86 | 8,628 |
| 11 Domestic Water System | 28,600 | 3,700 | 700 | 700 | 33,700 |
| 12 Desert Reclamation Enterprise | 38,400 | 25,000 | 12,500 | - | 75,900 |
| 13 Essential Services Network | 42,150 | 10,300 | 3,300 | 3,300 | 57,050 |
| 14 Building Materials Company | 41,450 | 13,650 | - | - | 55,100 |
| 15 Small Industries Development | 21,550 | 5,250 | - | - | 26,800 |
| 16 Intensive Agricultural Production | 36,050 | 17,950 | - | - | 54,000 |
| 17 Livestock Raising Combine | 7,130 | 1,655 | - | - | 8,785 |
| Total | £E 474,200 | £E 172,822 | £E 61,461 | £E 43,057 | £E 751,540 |

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toward local self-sufficiency

Key: 1.0 = £E 1,000

| items | | years | year one launching | year two expanding | year three resolving | year four rendering | Four Year Totals |
|---|-----------------------------|--------------------|-----------------------|-----------------------|-------------------------|------------------------|------------------------|
| | | | | | | | |
| Monies Injected and Stimulated | Outside Monies | Public Sector | 305.50 | 105.22 | 24.31 | - | 435.03 |
| | | Private Sector | 158.70 | 52.60 | 12.15 | - | 223.45 |
| | | Total | 464.20 | 157.82 | 36.46 | - | 658.48 |
| | Village Monies | Cash Contributions | 7.00 | 8.00 | 14.00 | 27.00 | 56.00 |
| | | Loans Assumed | 3.00 | 7.00 | 11.00 | 16.06 | 37.06 |
| | | Total | 10.00 | 15.00 | 25.00 | 43.06 | 93.06 |
| | Total Monies | | | 474.20 | 172.82 | 61.46 | 43.06 |
| Village Income Development | Village Annual Income | current 37.80 | 75.60 | 113.40 | | | |
| | Family Average Income | current .12 | .24 | .36 | | | |