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COUNTRY DEVELOPMENT STRATEGY STATEMENT

YEMEN ARAB REPUBLIC

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I. Summary

Less than a generation away from Imamic rule, Yemen has advanced quickly almost to middle-income status on the shoulders of the migrant workers who are its major economic resource. Nevertheless while political and social progress have occurred, they have been at a markedly slower rate, and productivity of the domestic rural economy on which a majority of the poor still depend has improved but little. Therefore, underlying the trappings of modernity the tangible effects of centuries of isolation and poverty are not hard to find. Under these circumstances, equitable access to increasing prosperity and fullest possible use of the resulting resources to fulfill basic human needs are the major program goals appropriate for AID.

To achieve these goals, the principal element in AID's strategy aims at very broad-based development of Yemen's human resource potential. A second major element in our strategy is directed at increasing and restoring the productivity of Yemen's limited soil and water resources. A third program element seeks to ensure the flow of benefits from the foregoing programs and from locally available resources to the rural population, by encouraging local institutions and private initiative. Finally by enhancing project planning and management capacity, we can encourage increased utilization of outside capital to implement other projects compatible with our overall objectives.

These are long term objectives in Yemen. While our budget levels cover a five year period, strategy, programs and even projects have been formulated within the context of our assessment of social and economic change in Yemen over the next ten to twenty years.

II. Economic and Social Situation

Today's Yemen is a contradiction. If development were measured solely by GNP, Yemen would be one of the world's fastest developing countries. Per capita GNP was only $172 in 1973/74 while in 1976/77 it was a respectable $469, an increase of 40% per year over the 3 year period. In almost any other terms - infant mortality, education, life expectancy - Yemen is still one of the least developed countries in the world. Even if there were demand for the services needed to ameliorate these conditions, the institutions and human resources required to supply them do not exist. This is not to deny that some progress has been made: out and out starvation is rare; malnutrition exists, especially among children, but is probably on the wane; and housing generally is being improved. Nevertheless, economic prosperity has not measurably increased the quality of life for most Yemenis and some have indeed been bypassed.

A. Macro-economic Trends.

Yemen's economy must be classed as oil related, since

migration to oil-rich countries and the resulting remittances are the most important phenomena affecting it. The rapidly increasing GNP has been fueled by increases in workers' remittances from Saudi Arabia and the Gulf, officially $1.1 billion in 1976/77. The amounts remitted in kind cannot even be guessed at. The best estimates point to 550-600,000 workers in Saudi Arabia alone, in excess of one-third of the total Yemeni male work force. The impact has been dramatic. The money supply grew 51% in 1974/75, the first year that reflected the oil price increase, another 120% in 1975/76 and 75% in 1976/77. Foreign reserves have surpassed the billion dollar mark. However, the increase in the money supply was matched by only an 18% rise in GDP for 1974/75 and an even smaller 3.6% rise in 1975/76 (due to the decline in agricultural production). Despite the rapidly increasing imports the excess liquidity from remittances, abetted by the lack of domestic production and investment opportunities, has induced a strong demand pull inflation. A cost of living index is available only for Sana and shows inflation averaging around 17% but this is an understatement due to the inaccurate weighting given to housing and food. A more accurate estimate is 30-40% a year.

Inflation is expected to continue as remittances grow. (Even if the rate of increase in remittance earnings were to slow down, there would be another billion dollars dumped into the Yemeni economy this year.) The rate of inflation will be determined mainly by the rate of growth of remittances and the rate of growth of imports. We project remittances to continue growing in amount for the foreseeable future albeit at a slower rate than noted above. Imports have grown from $258 million in 1974/75 to $730 million in 1976/77 and they have outpaced exports 40 to 1. So far, remittances have been large enough to make up for this continued trade deficit and have left the country with a positive balance of payments. With a relatively small government sector, no bond market and most of the currency held outside the banking system, increasing imports is seen as the most effective policy in curbing monetary expansion and inflation. However, the potential for increasing imports is limited by the capacity of the ports and airports to handle the increased supply of goods and thus the contribution that a policy of increasing imports can make to controlling inflation is also limited. While opinions on the likely future rate of inflation vary, what seems certain is that it will continue.

Government revenue is indirectly as dependent upon remittances as any other aspect of the economy. In fact, customs is the government's only means of taxing the remittance flow. In 1975, taxes on international trade accounted for 70% of total revenue and indications are that customs duties have more than doubled between 1975/76 and 1976/77. Total domestic revenues for 1975/76

rose by an impressive 48% over the previous year and collections in 1976/77 will probably be at least 50% greater than 1975/76. This is true even when foodstuffs, which account for 45% of imports, have very low or are free of customs duties and large volumes of other goods are smuggled. Central government revenue from other taxes is low due to the small local tax base and collection problems outside the main towns. In 1975/76 tax revenue equalled only 7% of GNP and 11% of GDP. Because of the government's inability to tax remittances directly, it is unlikely that this share will increase greatly over time. Although it is tempting for outsiders to suggest direct taxes on remittances YARG officials have been adamant in their position that even if it were administratively possible (which it now is not) it is politically infeasible to cut directly into so many Yemenis' new-found prosperity. Nevertheless, the present situation cannot continue indefinitely, and the YARG must find acceptable policy measures to increase its share of GNP and to direct a higher proportion of remittance income into productive investment channels. In the meantime it is important to keep in mind that virtually 100% of remittance income flows to private individuals.

Government expenditures on economic and social services have been paltry, although they have been increasing somewhat. Even so, budgeted expenditures on health in 1976/77 were 4% of the total, on education only 9% and on the total of economic services (agriculture, transport, etc.) only 7.5%. 1975/6 actuals were similar, and of the social services, most applied to the three major cities. In comparison, defense and public order and safety absorbed 60% of the current budget in 1975/76 and 59% in 1976/77. Civil servants view the levelling off in the proportion of military expenditures as a moral victory of sorts. Public order and consolidation of government control are valid reasons for a somewhat elevated level of military and related budgets, but continuity of power is undoubtedly also a major factor to the full understanding of high level defense and related spending.

Nonetheless government expenditures on development have doubled each year since 1974/75. In addition, external capital has flowed into development projects at a rapidly increasing rate. Total development expenditures were 30% of the overall budget in 1974/75, 42% of a much higher budget in 1976/77.

Overall deficits in current and capital accounts have been more than covered by external aid, primarily cash grants from Saudi Arabia and project and commodity loans.

B. Domestic Production

1. Agriculture

Although its relative contribution is declining,

agriculture is still the most important sector of the domestic economy, accounting for 45% of GDP in 1975/76. However, the sector has now and probably will retain an importance out of proportion to its share of GDP for two main reasons: First, the only known exploitable natural resources in Yemen are agricultural. Other resources are either trivial or pious hopes at this time. Second, most of Yemen's stay-at-homes depend on agriculture for all or a portion of their cash income and subsistence. About 90% of the population live in rural settlements of 2,000 people or less and are scattered over the country in extremely diverse ecological zones. About 70% of the domestic labor force is employed at least part time in agriculture.

Subsistence grains (chiefly sorghum and millet) account for 90% of crop acreage. Yields have been fairly stagnant at around .75 mt per hectare. Horticultural products, mainly grapes, plus qat and cotton are the principal cash crops. Overall output depends so much on rainfall that it can fluctuate sharply from year to year. Average growth in value over the past five years has been about 3%, ranging from a decline of 10% to an increase of 28%. 1976/77 output is believed to have declined about 9-10% due to poor rains.

In 1975 about 800,000 family households were engaged in farming, which means that the average land cultivated by each household was two hectares. There are simply not enough data to tell what this average conceals, however. Some published information indicates that holdings (about 80% of cultivable land is in private hands) vary from 1/4 to 10 hectares, roughly depending on productivity of the ecological zone. We know there are some holdings which are far larger, however-- running into the hundreds of hectares, particularly in the Tihama.

Nor do we know much about tenure patterns. The degree of tenancy appears to vary considerably, both within and between areas, ranging from a very low percentage in the central highlands up to 50% and even 90% in some areas. Owners of even small plots frequently employ sharecroppers to till the land. The traditional 50-50 sharing arrangement has been altered to fit varying conditions. In general, tenants receive one-fourth to one-third of the crop on irrigated land and one-third to one-half in rainfed areas. How these conditions affect incentives and productivity and how they may be changing as a result of migration are subjects about which we simply do not know enough.

There are several major constraints to increasing agricultural production. Only 8% of Yemen is cultivable and the country is already quite densely settled, reflecting a long history of

civilization. There are already 350 persons per square kilometer of arable land compared to about 330 in India, 280 in Pakistan, 80 in Morocco and 60 in Syria. Over 90% of the arable land depends on sporadic and very limited rainfall; groundwater resources in most areas are in precarious balance, and fertile areas are often isolated, making marketing of cash crops difficult. As if that were not enough, agriculture has been significantly affected by migration, and many areas of the country are experiencing a shortage of agricultural labor. Marginal lands are going out of production as labor is unavailable to repair terraces at remunerative costs. An increasing proportion of farm work is being done by women, and large tractors are beginning to replace oxen in some areas.

Despite these constraints there is good reason to believe that the productivity of present major inputs (land, labor, water) can be increased substantially. The search for more productive technology is basically in a very early stage. Accurate data on soil and water resources are being collected, but far more collection and analysis needs to be done. Also, work on problems like soil/water relationships, fertility and irrigation methods has really just begun, as has adaptive research on the genetic potential of traditional and exotic crops. Mechanization has clear potential for increasing labor productivity. The rate of fertilizer usage is only about one-third that of Syria, 1/20 that of the U.S. On the whole, therefore, it appears that substantial technological improvements are possible. Although tastes are changing as incomes increase, it is also clear that the internal market for agricultural products is growing.

Institutional and policy constraints need more attention if the potential for agricultural production is to be realized. The Ministry of Agriculture can hardly be termed even fledgling; its indigenous research and outreach capability are essentially nil at present. There are fair numbers of Yemenis in training, but it will be well into the 1990's before the Ministry can be independent of outside assistance. An Agricultural Credit Bank exists and appears to be gaining momentum, but policies are not directed toward small farmer lending. A few farmers' cooperatives have been formed recently. This is a development, which we should encourage.

Government policies overall are probably negative in their effects on agriculture. The zakat, which is a traditional Islamic tax on agriculture, usually assessed at about 10% of production, is the only major income-related tax in the country. Since farmers tend to be poorer, the tax is probably regressive and, since it directly taxes production, is a disincentive to increased agricultural production. (On the other hand, up to

three-fourths of zakat collections are frequently reserved for local development initiatives.) Customs duties also tend to distort farm prices unfavorably. Duties on imported foods, including cereals, are either zero or very low, while farmers' inputs are taxed at higher rates. In addition, the YARG has doubled the level of grain imports over the last year, which will tend to encourage and reinforce a change in consumer tastes away from traditional staples.

Looking 20 years ahead, we can see agriculture continuing to decline in its share of GDP. (The Five Year Plan estimates in that period alone agriculture will decline from 44.5% of GDP to 39.2%.) Yet, this is a rural country, and a large number of people will continue to depend on agriculture for a living. We are confident in our assumption that the most remunerative use of resources for many farmers will be production of high value crops such as grapes, fruits and vegetables, both for the growing internal market and quite possibly for export to neighboring countries. At the same time, the existence of a substantial amount of marginally-watered land indicates that dryland crops will be the only major alternative for a large, although decreasing, number of farmers for some years to come. They cannot be ignored.

Finally, Yemen must address the problem posed by its narrow and precarious soil and water base. A combination of factors seems to be leading to overexploitation and deterioration of that resource base. Well drilling, use of wood for fuel, overgrazing, high labor costs discouraging preservation of terraces, higher population growth and other factors lead us to believe that immediate attention must be given to more sparing use and, over the long term, restoration of resources.

2. Other Sectors

Following agriculture, the most important sector is trade and commerce. It is also the fastest growing. It accounted for 23% of GDP in 1975/76 and is growing at a rate of 24% over the last year. Significant amounts of remittance income are being invested in shops, in trucks to haul imports, and in inventories. Trade appears to be the sector which provides the remittance nouveaux riches the means of upward social mobility. The Five Year Plan shows commerce increasing its share of GDP from 23.6% to 25.7% over the period and in a twenty year time frame we would expect it to grow much larger than that. While Yemen will probably never become an international commercial center, it will continue to have a strong internal market to supply. Assuming continued migration and remittances, the limited productive potential of Yemen means that imports will continue on a large scale and will continue to stimulate growth in trade and commerce. Yemen's trade will continue to be based mainly on labor remittances and imports.

The finance and banking sector accounted for 2.7% of GDP in 1975/76 and is expected to grow to 2.9% in 1980/81. The sector has grown over 30% a year since the oil price rise and will continue to grow as trade and commerce develop.

The construction and transport sectors are also increasing rapidly as a response to remittance wealth. Home construction is a primary remittance-generated expenditure and the transportation sector is distributing the huge volume of imports. Both sectors are expected to grow at 12% annually during the Five Year Plan and their share of GDP will continue to increase over the next twenty years.

The industrial sector is extremely small, accounting for only 6% of GDP in 1975/76. Industrialization in Yemen is hampered by the lack of a comparative advantage in any industry; there is no surplus, cheap labor to exploit and, with the exception of salt, Yemen has no known marketable natural resources. Any future mining or quarrying possibilities will have to face the constraint of limited water. Therefore, the sector is expected to grow only slightly during the Five Year Plan with most of the growth being accounted for by the electricity and water supply sub-sectors. Future growth of the sector also faces serious constraints and will likely be low.

C. Migration and Remittances

This phenomenon needs closer scrutiny, since it affects more Yemenis more acutely than any other aspect of contemporary economic/social life. Yemen has had a long history of migration to all parts of the world, and the Swiss verification of the 1975 census shows relatively equal distribution of migrants between all governorates (with the exception of Al Beida in the South-East which has had a longer history of migration). Access to the opportunity to migrate, therefore, appears to be tied more to the historical pattern of the area than any ethnic, social or geographical constraints. The process is simplified for workers from areas which have historically had migrants because they have more contacts and better knowledge of the system and have friends who can help. One can postulate, therefore, (but not prove) that people of the Tihama may have less access to the migration opportunity, but this is not at all certain. Then, too, there is considerable (and easier) migration within the country to remunerative jobs on major construction projects.

Migration provides an opportunity for Yemenis from all stations in life to earn large amounts of money. Wage rates for the most unskilled workers in Saudi Arabia are currently averaging $26 to $35 a day. Some portion, perhaps a significant number of the Yemenis in Saudi Arabia, work in the retail trade sector and are probably earning more than that.

The benefits of migration, i.e., the amount of money one earns, appear to vary directly with education. Yemenis with some skills and education earn more money than their less educated brothers. Thus, although migration provides an opportunity for poorer Yemenis to increase their economic status, it provides an even better opportunity for the more skilled Yemenis to do the same thing. The families that do not migrate at all and who remain in the subsistence agriculture sector are the ones who are probably hurt the most by migration. Their cost of living has gone up dramatically due to the remittance generated inflation but their incomes have not, except to the extent they grow cash crops.

Although Yemen's future in the Saudi Arabian labor market cannot be known with certainty, we expect that Yemenis will continue to work there in large numbers for at least 20 years, definitely throughout our planning horizon.

The threat that they may be replaced by other nationalities appears remote, as these groups are themselves hiring Yemenis to do the most unskilled work on their projects. That Saudi economic growth will dampen and thus decrease the need for Yemeni labor also seems unlikely since construction has not even started on most of the large industrial projects the Kingdom has planned. The Saudi Government has recently approved measures that will require all immigrant workers in the Kingdom to hold work permits. In the past, Yemenis have been exempted from recruitment regulations and have been able to move from job to job as employers outbid each other for their services. What the impact of these changes in regulations will be is unknown but barring any sharp reversal in relations with Saudi Arabia, we feel the demand for Yemeni labor will continue well into the future.

The YARG has very little potential for controlling migration and, although it has made some motions to do so, its de facto policy is to do nothing about it at all. Since the government does not control the northern portion of the country, it would appear that at present there is little it could do to control migration. The YARG could, though, help to control the value of its export, i.e., improve its quality through vocational or technical training before it leaves. This would increase the value of the export and thus the remittance flow.

Remittances have accomplished what many development projects strive for: they have put income directly into the hands of people. Without any direct tax on remittances, the worker keeps all that he earns, and thus very little of this flow finds its way into government coffers. Remittances are apparently being used primarily for housing construction and increased consumption of food, clothing and luxury items such as radios, watches and jewelry. The rapidly inflating bride price absorbs a significant share of remittance income and the purchase of small electrical generators is popular. Some people are also using part of their remittances for other investment purposes usually in the areas of transportation (trucks and taxis) and trade. Some remittance money is going into public investment by way of the Local Development Associations (LDA's).

Continued growth of remittances will mean continuation of the rapid increase in GNP. Most of this will be directly in the hands of the people, and will continue to

cause rapid change in both the economy and the social situation.

D. Social and Political Setting and the Poor

1. Social Setting

Perhaps more dramatically than most developing nations, Yemen is in the throes of dynamic social change. Economic forces are altering the social fabric in ways not yet fully understood by the Yemeni people, their government or interested foreigners. Today's Yemen is a mingling of fierce traditionalism and dynamic modernization, of abject poverty and relatively widespread new wealth.

Much of the modernizing influence derives from remittances and its spread effects. Few areas remain untouched in some way by the flow of outmigrants and the money they are able to bring or send home. For example, over time fertility is expected to decrease as a result of migration; at present the population growth rate is estimated to be not more than 2% per year. Yet per capita income rose last year by twenty-two times that rate.

This monetary growth as indicated before has not been channelled into any dramatic improvement in quality of life. Most standard measures remain abysmally low and decidedly typical of hard core RLDC status:

- a crude birth rate of 46 per 1000, a crude death rate of 25 per 1000 and an infant mortality rate of not less than 150 per 1000;

- a life expectancy of only 37 years;

- an average female marriage age of 14;

- an average of 6.8 live births per woman;

- a doctor-person ratio, excluding the three major cities, that ranges from 1/26,000 to 1/157,000;

- a widespread incidence of diarrheal diseases, tuberculosis, malaria and schistosomiasis, with underlying causes associated directly with ignorance of personal hygiene practices and poor quality potable water;

- a lack of access to water with 88% of the population dependent upon cisterns, open wells or streams; only 8% of the population have easy access;

- a nutritional level, measured at 59 grams of protein and 2,000 calories per day, which yields only 75% of minimum caloric requirements;

- a literacy rate for males of 25%, only 2% for females and an average of 13%;

- a school enrollment of only 3% of secondary, 5% of preparatory and 29% of primary school aged children, with girls only 11% of all enrollees.

As bleak as this brief and by no means exhaustive listing seems, the possibilities of and forces for change are manifest. First, money from remittances and burgeoning local trade and commerce is in the hands of more people and on a much wider basis than in most RLDC's. Second, due to the outmigration a large portion of the male work force is being exposed to modern ways and greater aspirations. Third, some of the indicators already represent considerable improvement. One need only look into the education sector, for an example. As late as 1962, only religious education was available in Yemen. By 1970, there were 700 primary and 4 secondary schools. Between 1970 and today, the number of primary schools has increased by 300%, secondary schools by 700% and Sana University is firmly established. In keeping with other developments, however, this progress has occurred largely in the urban areas. The three urban governorates have 40% of the country's population but 67% of the primary students, 87% of preparatory and 92% of secondary.

Similarly, health care has improved considerably over recent baseline years. Still, the nation has a completely inadequate health system. The system, as yet, has only 76 inadequately staffed rural health units in the entire country, with staff-ratios varying from 1-6000 up to 1 to just under 20,000. Thus, the delivery of health services has barely begun. Then too, no family planning services are available through such clinics, although a family planning association operates dispensing services through foreign operated clinics mainly in urban areas. Family planning services are also available through commercial outlets, and demand does seem to be growing. Nonetheless, there remains the strong anti-family planning outlook on the part of religious leaders and considerable public sentiment to have abundant male children.

Clearly one can project many changes in the next 5, 10, or 15 years. What these will be requires study. For the moment, we can say, however, that there is evidence that new patterns of commerce and settlement can be expected to emerge in the coming years. With them, one could expect, for example, changed family relationships and different marriage customs. Already the traditional custom at marriage to local patrilineal cousins is changing to much more wide ranging marriage alliances; social cohesion in extended families is giving way to the more autonomous nuclear family pattern, and traditional tribal controls are giving way to new forms of local organization.

Consumption is expanding the scope of life style for many. Radio, cassette recorders (already widely used for letter tapes between separated marriage partners), vehicles, and consumer goods of all descriptions all are forces for altered relationships and set the stage for still more social change.

Perhaps one of the most dramatic social changes is in the role of women. Traditionally, women have married young and have been looked on solely as bed partners, housekeepers, water carriers and as child bearers and raisers. With the migration of large numbers of husbands and brothers, women are taking on many traditionally male tasks as well. In some areas women and children already make up much of the agricultural labor force. On the other hand, women are benefitting from modern conveniences purchased with remittance income such as butagas instead of charcoal and flour instead of hand ground meal. In addition, women are gaining far more economic power than they ever had before. They are spending some of the money sent home and many manage households while the males are away. Some are participating in investment decision making, and a number are beginning to take jobs in banks and government. Even the use of the veil seems to be declining among the urban girls and young women. The momentum of change will surely grow.

2. The Poor

Amid all this flux- both constraints and possibilities - the question remains: Who are the poor?

Clearly, Yemeni women could be defined as poor. They are denied the social and political advantages given to men, they do an increasingly large share of the work and are denied any real access to collective local decision making and organization.

Probably the only other easy definition of poverty in Yemen would be families that don't have male relatives to migrate and members of the akkdam or servant class. Migration is the engine of economic and social change and families without migrants are simply left out. The 1975 census shows gpvernorate migration rates varying from 3.1 and 4.7% in Marib and Hajja to 8.2 and 11.4% in Ibb and Al Beida, showing that some areas of the country are taking more advantage of the opportunity than others.

In the rural areas, there appear to be at least three economic classes: First, there is a very wealthy upper class consisting of large landowners and merchants who have strong ties with the national wholesale and transportation trade. These people are usually found in regional market centers located close to good roads. Second, there is an emerging middle class made up of small shopkeepers and truck and taxi owners in the towns; land-owning peasant farmers who grow cash crops such as qat and grapes; and subsistence farmers with income from migrants. Lastly, there are the least well off-landless laborers, tenants, and subsistence farm families without migrants.

In summary, we see for the present the following as the major determinants of poverty:

a. Migration/remittances -- the most important factor and the source of roughly 43% of per capita income in 1976/77 and growing in importance. As yet, we have detected no obvious pattern to the source of migration and have found a high incidence from both areas with high and low agricultural potential. Remittances appear to provide the principal means of upward social mobility available to the low and middle classes, but as noted above, the benefits seem to accrue disproportionately to those physically located best to capitalize on them.

b. Agricultural productivity of the region -- especially the potential for production and marketing of cash crops (qat, grapes) or large-scale, irrigated grain production.

c. Physical Access -- In addition to the inherent productivity of the land, physical access is of significant importance. The most prosperous regions of Yemen as of today, either agriculturally or commercially, are those located near regional market centers close to good roads. Access to these centers and to a national market system is an important variable affecting the degree of economic prosperity. Vast numbers of Yemen's rural inhabitants still suffer the consequences of limited access to economic opportunity and to existing services. Lack of physical access also inhibits economic delivery of government and private goods and services to these areas.

d. Land tenure -- no precise figures yet exist, but tenancy is known to range from a relatively low incidence in the highlands to 50 and even 90% in the Tihama. The observable decline in overall living standard from highlands to Tihama may very well be attributable to the higher incidence of sharecropping there, even though agricultural potential along major wadis in the Tihama is relatively high.

e. Literacy -- essential for recourse to legal/political system and highly correlated with poverty. Illiterates can retain clerk/advocates but still remain very much in the clutches of the literate, wealthier classes.

f. Ethnicity, race -- an unknown factor, generally regarded, particularly by the government, as insignificant. There does appear to be a relatively high degree of poverty among the blacks of African origin, located primarily in the Tihama, and in the akkdam (servant) class, but it is not known whether this is a function strictly of race or of the other factors mentioned above.

Obviously, more precise and quantitative delineation of the poor in Yemen is at present very difficult. Poverty, in terms of access to services and means of social/economic betterment is undeniably pervasive throughout the rural areas, but with significant local variations in degree. All that can be safely said, until further study can be undertaken, is that the poorer areas are those of low migration, low agricultural potential (subsistence farming dependent on rainfall) and/or a high incidence of tenancy.

3. Internal Political Dynamics

As expected in a nation undergoing extensive socio-economic change, patterns of center-periphery political-administrative relationships are in a state of considerable

flux. Traditional patterns of leadership and authority are crumbling or accomodating as the central government attempts to reach out, although haltingly in many areas, to all sections of the country.

In and out of government and throughout urban and rural areas the younger generation -- men in their 30's and 40's-- are replacing traditional leaders--men a decade or two older. Tribal shayks, important landlords, religious experts, and heads of extended tribal families, though still largely respected, are being consulted less frequently in regional and community matters. Entrepreneurs and other individuals engaged in new forms of economic enterprise are taking more important informal and formal roles, including most appointed and elected positions in newly emerging government structures, from the quasi-governmental Local Development Associations (LDA's) to the Governor's office. Such new leaders also represent the most important group interacting with bureaucrats, often also of local origin, being assigned to rural areas from the Central Bank, Ministries of Education, Health and Supply, and Office of State for Land, Justice, and Law.

In fact, however, as certain as we are that our general description above is accurate, we are equally certain that the whole gamut of the YAR's internal political-economic relationships defy cataloging at present. The new arrangements are extremely tenuous and fragile--for example, most recently the effects of the presidential assassination leave a great many questions about tribal allegiances, the status of the LDA's (one of the late President's favorite patronage dispensing structures) and, most important, the form and effectiveness of local and national representative institutions. For the present, the nation remains under the control of a Military Command Council which has just announced the formation of a constituent assembly and has appointed its delegates. Although the military leadership tends to defer (or at least says it does) to a thin layer of technocrats when it comes to individual development decisions, it clearly plays a more important role than that. It commands resources including manpower and money and it has the opportunity to align itself, i.e. to lead, in a modernizing direction. Unfortunately, it appears to have little capacity for fulfilling this development potential. Given this situation, and in view of the fact that no effective alternative form of central authority is in sight, the U.S. should increase the amount of military training funds devoted to development of a broadly-educated officer corps.

Perhaps the most important modernizing force in the whole emerging structure of local organization is the network of LDA's. Throughout Yemen, these locally elected committees are being formed to initiate and manage local

development activities. The LDA's draw upon a portion (up to three-fourths) of the zakat for their operation. This is the key institution in a pattern of decentralized development effort in Yemen. The LDA's are organized at provincial and at central government level in a Confederation of Yemeni Development Associations (CYDA). As yet, however, neither the central government nor CYDA has much capacity to provide many services to the LDA's.

Lest the impression of thoroughgoing and rapid change be taken as a general rule, we must add that there remain large scale differences between regions and even within regions. Many areas--the most inaccessible and least advantaged economically, or the most traditional and independent tribally--remain much as they have for centuries and fiercely resist any central government incursions. At present, large areas of the north and the northwest have no central government presence. Generally, only the south and central highlands and the desert along the Red Sea are controlled by the YARG. As a final note to give perspective, even in the areas controlled by the central government, the traditional is still very much present alongside the changing character of local interaction and burgeoning institutions. Notably, most decision making still seems to occur out of office and in the forum presented by the unique Yemeni institution of the afternoon qat chew.

E. Government Policy and the Five Year Plan

What of the Government and its role in determining the future? In the boom times of the 1970s, the Government has moved decidedly away from economic regulation. Controls on exchange rates and investments and most other facets of the economy have been relaxed. In effect today's Yemen is a unique contemporary version of 19th century laissez faire capitalism. For the moment, perhaps this has been wise policy. Yet, if continued progress and any sort of balanced and socially just growth is to occur, clearly, the government has numerous policy choices to make.

- What will be the share of government in GNP, and what will be the sectors of government activity? As we have pointed out, government's share of GNP is low by most standards, and goes principally to support a military establishment which is tribal and largely vacant of modernizing leadership.

- To what extent and how can the government increase its take from remittance income and channel it into building essential human resource potential? How much of this job can be left to local initiative? So far, the government has shown no heart for tapping remittances directly, and human resource expenditures have expanded slowly.

- What will government's policy be toward agriculture? Will the emphasis be on benefiting urban consumers through low prices or on providing incentives to local production? Will farmers be encouraged to produce to their best advantage in the light of internal and world market prices? How much initiative - in production and distribution of inputs, and in marketing - will be left to farmer organizations and the private sector?

- Will government policy and budgets encourage preservation and restoration of the resource base? What will government policy be regarding use of Yemen's limited water supplies for irrigation? for potable water? for industry?

- Will industry be left to the private sector? Will it be subsidized, temporarily or permanently protected?

- How will the migration opportunity be taken advantage of? expanded? restricted?

- What will be the relative emphasis on urbanization and rural development? How soon will measures be taken to curb the population growth which is bound to come with better nutrition and health care?

Obviously, there are more questions than answers and, in a situation characterized by great opportunity and rapid change, setting long term policy requires more analysis and more reliable policy makers than now exist.

The First Five Year Plan

Yemen's economy suffers from a general lack of infrastructure including roads, ports and communications; lack of skilled and semi-skilled manpower; weakness or absence of institutions; primitive construction sector and few natural resources. But, because of the country's long isolation from outside influence, it must play catch-up ball. To tackle these obstacles, Yemen recently completed a Five Year Plan covering the period 1976/77 to 1980/81. It calls for a total investment of $3.5 billion (constant 1975/76 prices) or an average expenditure of $700 million per year. This is four times the actual level of investments in 1975/76, the last year before the plan started. On a per capita basis, the plan will spend $135 per person per year.

The Plan provides an exhaustive catalog of current conditions and problems and, at least at the national, inter-sectoral level, a coherent development strategy. The basic plan is to push for continued rapid growth in GDP (targeted average annual growth rate of 8.2%) while developing the infrastructure (primarily physical) to facilitate future growth. High emphasis is laid on mobilization of local resources, domestic capital formation and reduction of trade imbalances through import substitution.

The total range of objectives and strategies cited in the Plan touches virtually all bases including improved standard of living, maximum food self-sufficiency, human resource development (including women), and integrated rural development. However, the projected sectoral distribution of investments provides a much narrower and more accurate indicator of actual priorities. This indicates that fully 69% of total planned investment, public and private, will be in development of physical infrastructure and industry, with 14% going to agriculture and 10% going to government services including health (1.8%) and education (4.7%). As a result of the heavy emphasis on infrastructure development, the incremental capital/output ratio is expected to climb from an average 2.8 to a remarkably high 8.8 during the plan period.

Forty-eight percent of the budget will be invested by the government, 42% by the private and mixed sectors and 7% by the rural cooperative sector. The plan will be financed largely by external loans and grants 53%, and internal financing will come mainly from the private sector. The private sector's contribution is expected to be financed mainly from current remittance earnings. Investment will come from external grants and loans plus investment of current remittance flows. Final consumption exceeds GDP and net domestic savings will continue to be negative during the entire Five Year Plan.

The Plan precisely defines projects for two-thirds of the investment but leaves one third undefined for projects which are small and dispersed, most of which fall into the private sector. Thus, the government assumes that the private sector will mobilize remittances to the tune of a billion dollars over the next five years, probably a safe assumption since remittances are expected to be greater than 10 billion for that period.

The planned growth rate for GNP is 6.8% per year. This is unrealistically low due to underestimation of net external transfers, i.e., remittances. For example, they plan for remittances to decline 1.4% in 1976/77 when, in fact, they almost doubled during that period. We feel that this was probably done on purpose so as not to show tremendous GNP increases due to remittances; per capita GNP is likely to exceed $600 next year. We feel that because of this huge underestimation the Plan's economic growth targets will be substantially exceeded. The Plan also underestimates the rate of increase in imports with the 1976/77 figure being off by 50%. With continued high remittances, the government will have to compete with the private sector for port capacity for imports. Consumption goods in 1975/76 were 92.1% of total imports. Although the amounts of such imports are projected to grow at 11.7% over the Plan period, the proportion to total imports will be only 46% in 1980/81, with capital goods accounting for the balance. We believe the consumption estimates are modest and will probably be exceeded.

The Plan is very thorough in laying out what it plans to do but it is weak on how it plans to implement it. Probably the most serious constraint to implementation is the lack of labor, especially skilled and semi-skilled. Considerable technical assistance will be needed to carry out the Plan. A second serious constraint is the lack of the administrative expertise within the government agencies necessary to implement the investment programs. As yet, sufficiently trained counterparts are often unavailable so little knowledge is transferred to local Yemeni staff and those who are available often are shifted from one position to another and are spread very unevenly. Additionally, the inadequate port facilities will delay arrival of necessary project commodities and the local construction sector is inadequate to handle the planned levels of investment expenditures. Repair and maintenance facilities are almost unheard of here and it is questionable how long completed projects will function viably.

To cope with some of the problems, the government has made the following policy decisions: (a) to use capital intensive technology since it has no unemployment problems to solve; (b) to abolish restrictions regarding the importation of expertise and skills and to allow contractors to bring in the required foreign labor force to implement their projects; (c) to use the "turn key" principle for project implementation by asking foreign contractors to hand the government completed projects

without burdening the government administratively; (d) to operate completed projects via foreign management contracts; (e) to absorb the labor reserve by providing all possible incentives for women to enter the work force; (f) to establish the General Construction Company to organize daily hire laborers, and finally; (g) to in no way restrict the immigration of workers outside the country.

The decision not to restrict migration is based on politics as well as need; Yemen certainly needs more laborers but there is no politically feasible way to control the migration and the individual prosperity it brings.

While the government's main commitment is obviously to infrastructure development this is not entirely out of keeping with their needs. Although many of these projects do not help the poor directly, they are necessary for the future development of Yemen and given the supply of external funds from Arab brothers, they would be foolish not to embark on a plan of infrastructure development. Additionally, it will be possible for the country to complete infrastructure projects by using foreign contractors but the country is not equipped administratively or technically to absorb equally large budgets in the health, education and welfare sectors. This is not to say expenditures for the latter sectors could not have been larger, especially in the rural areas.

Even given these constraints, the Plan does address rural development directly in several sectors. For example, there are detailed plans for rural water supply systems under the Rural Water Division calling for $50 million; the Confederation of Yemen Development Associations (CYDA), which works directly with the rural villages, has a budget of $225 million; $830 million is budgeted for roads almost exclusively in the rural areas and the Ministry of Agriculture has allocated $50 million specifically for integrated rural development. These projects should impact on the rural poor directly and they total $1.1 billion or about one-third of the total Five Year Plan budget.

Some Specific Sectoral Goals show:

Health-Building of 259 primary health units, 97 dispensaries and 37 health centers; innoculation of half the children against contagious diseases; significant reductions in the incidence of TB, bilharizia and malaria; increase of health staff by 75%, and a 74% increase in hospital beds. Urban hospital development and support is allocated 56% of the total budget.

Education - The number of primary students will increase from 253,000 to 427,000 (69% overall increase, a 168% increase for girls), preparatory students from 16,000 to 40,000 (159% increase) and secondary students from 7,000 to 16,000 (139%

increase); Sana University students will increase by 752%; 7 basic training centers in the rural areas for informal education will be operating and 1500 students will graduate from adult literacy campaign.

Roads - Construction by the national government of 685 kms of asphalt roads (75% increase over existing system) 1919 kms of gravel roads (145% increase) and 561 kms of dirt roads (30% increase). 7760 kms of secondary roads are to be constructed by the LDA's.

Agriculture - primary objective of moving toward self sufficiency in food via heavy investment in Wadi and dam development - 25% of total budget and 46% of budget for identified projects.

III. U. S. Interests and Strategy Options

A. Interests.

Political interests of the United States in the Yemen Arab Republic are not extensive or direct. Nevertheless, since the resumption of diplomatic relations in 1972 our presence has been steadily enlarging and is thought to have had an important effect on moderating Soviet and radical Arab influence in the YAR specifically and in the Arabian Peninsula at large, the latter an area of major U.S. political and economic interest. Moreover, given its geographic relationship to the troubled Horn of Africa and Marxist South Yemen, the YAR's political relevance may increase in the months and years to come. A prosperous and relatively egalitarian free enterprise economy in the YAR is an objective to be sought. Finally, an extensive exporter of labor to Saudi Arabia the YAR is of considerable importance to the Saudi economy. Broad-based developmental progress in Yemen is seen, therefore, not only as a humanitarian imperative but also as of economic importance to the Peninsula at large.

The U.S. has growing commercial interests as well. Yemen's rapidly expanding market offers a substantial opportunity for U.S. business to build on its already considerable investment and trade in the Middle East.

Our interest in Yemeni development per se is more important still. Starting from near-medieval status in 1962, it is possible for Yemen to be a prosperous, modern nation within one more generation. Associating the United States with this prospect in a significant way can contribute importantly to our long range interests in this area of the world.

B. Strategy Options

Looking at short-term political interests, a program

devoted to planning, financing and implementation of visible capital projects would probably be best understood by the present military leadership and many civilians as well. It could be combined with an extensive and flexible training (scholarship)program to serve longer term needs and interests. This kind of strategy would be reasonably supportive of U.S. interests, mainly short-term ones, and could be implemented at fairly substantial financial levels with limited official American presence. However, with Yemen entering a critical institution-building period, and the likelihood that short range economic interests would lead to inequity and over-exploitation of resources, we do not think it is an acceptable strategy overall.

AID could also take a more direct approach to satisfaction of basic human needs. While these needs are decreasing, they certainly exist and could be addressed by a series of action-oriented resource-transfer programs, including PL 480, medical assistance via voluntary organizations, extensive well-drilling and similar activities. This type of program, too, could be complemented by a large scholarship program. It also has the defect of bypassing the institution-building phase and the resource-transfer program would be a bearcat to administer under local political conditions and AID procedures.

The strategy we propose is a more accelerated approach to building Yemen's capacity for policy-making, planning and management - at both central and local levels - of development programs which will have equitable and beneficial impact. Thoughtful project selection is necessary in order to improve our chances of achieving significant impact on the needs of the less-advantaged groups, and to quicken the pace with which the YARG comes to grip with long term human and natural resource problems and opportunities. This approach implies greater attention to institution-building, and calls for higher levels of technical expertise, large official program design and evaluation capacity and more carefully directed training programs. In some ways it is harder to administer and less easily understood than the other possible strategies, but there are ways to minimize some of the administrative problems and we believe this approach has the greatest chance of enabling Yemen to fulfill its promising future.

IV. USAID Development Strategy

A. Recapitulation

It is possibly worth reiterating from the previous section a few salient points on which our proposed strategy is based.

- The migration/remittance phenomenon will continue and probably grow somewhat overall; cost and availability of labor will continue to be closely related to Saudi conditions.

- Access to migration opportunities is fairly widely distributed, and it may not be easy to identify significant groups not having access.

- The impact of remittance income on individual quality-of-life components has differed, but on the whole has been minimal; some groups are more affected than others.

- Most remittance income, including its ripple effects, will flow into private hands; central government will continue to have difficulty increasing its share of GNP and covering recurrent expenditures.

- Private enterprise and, increasingly, local institutions are alive and growing in Yemen.

- The basic production sector of the domestic economy will be agriculture, barring hoped-for but not highly probable mineral reserves. Soil and water resources are limited and present technology puts increasing pressure on them.

- Commerce, transportation, construction, and perhaps, agro-based industry will be the other important productive sectors.

- There is no lack of foreign capital for infrastructure development, which will be constrained more by lack of technical capacity to manage projects.

B. Priorities

These points suggest a technical assistance program directed at the following general priorities:

- Broad-based human resource development to expand economic opportunity and to convert prosperity into fulfillment of basic human needs;

- Development of agricultural institutions and technology to increase and restore productivity of the primary natural resources;

- Expansion of our understanding of human needs and of local institutions through research and pilot programs, and development of institutions which can increase availability and equitable access to needed services.

- Development of the YARG's policy-making capacity, with emphasis on areas having impact on basic human needs, and expansion of its capability to plan and manage an accelerated flow of foreign and domestic resource into development programs and projects.

C. Considerations and Criteria

Within the above priorities, the discussion in Parts II and III also suggests certain emphases.

1. Public/private. The vigor of the private sector and the fact that it will continue to receive the major share of GNP suggests to us that AID's assistance be designed to stimulate and expand its capacity for meeting basic human needs. Since our assistance will be perforce mainly to the public sector, it should attempt to strengthen those public services which support the private sector and should also be designed to encourage the minimum public involvement necessary to ensure that the country's economic resources are developed and are applied to fulfillment of BHN. Our present view is that the following functions deserve current government attention:

a. A policy framework to encourage efficient operation and development of the private sector.

b. Delivery of necessary services which private sector cannot do at remunerative levels, e.g.

(i) education and some training

(ii) political/administrative infrastructure

(iii) research/resource cataloging

(iv) primary infrastructure, e.g. national and regional roads, hospitals, urban services

(v) central financial services and, to the extent necessary, development lending

c. Guarantee social order and stability, i.e., legal system, military and police.

2. Central/local. Resources are increasingly available at the local level and there seems to be an encouraging amount of initiative at that level as well. We think this situation has considerable potential for identifying (accurately) and fulfilling very basic human needs. More research and, particularly, experience are necessary, but our present view is that our assistance should emphasize development of local institutions, including new kinds of cost-sharing arrangements; new kinds of need-filling activities (including education and health); and development of local human resource capacity to support these institutional arrangements. In general, we should provide capital resources only in the context of catalyzing local initiative, and our support for related central institutions should be designed so as not to usurp such initiative.

3. Urban/rural. Clearly, the 90% of Yemenis who live in the rural areas have less physical access to services which fulfill basic human needs. Notwithstanding, except for construction of regional roads, most need-fulfilling infrastructural development in the Plan will occur first in urban centers. Our program and projects, on the other hand, should be designed and implemented with a definite bias toward people who live in small rural communities.

4. General/particular. We think that AID's legislation and the country situation require careful discrimination between the general and the particular, mainly for equity reasons. For example, we view broad-based primary education as a major means for achieving our first priority objective. Equity considerations however make it clear that girls and rural areas should receive emphasis. Similarly, research on agricultural technology should tend toward crops and systems which are, or can be, used profitably by small farmers.

5. Short term/long term. The strategy we propose is, generally speaking, long-range. However, some aspects of the country situation call for different approaches. For example, the primary education system, a fairly long term development program, is thought to be the key to increasing migration-related prosperity and to more intelligent use of resources to improve quality of life. But what of the many who have not had, and will not have, until the system is fully developed, a minimum basic education? Their numbers and their potential lead us to the conclusion that basic non-formal education should receive emphasis while the formal system is building. Another aspect of the short term/long range consideration is to realize that certain very long term objectives can only be achieved by beginning now to lay a technical or human resource base. Restoration of the natural resource base is such an objective.

6. Capital/labor. It should be clear that employment-generation should not be an objective or our program. Labor costs and the shortage of labor, in fact, may justify special training programs to enable less-skilled Yemenis to use specific kinds of equipment which multiply the productivity of their labor. On the other hand, imported technology should not be so complicated that it cannot be indigenously operated and maintained within a reasonable time. Care must be taken also not to mechanize out of economic range jobs which provide a means for entry of women into the modern work force.

B. Sector Goals and Programs

Goal 1: Equitable and expanded access to economic opportunities and fullest possible use of resulting resources to fulfill basic human needs.

Based on our analysis of the present situation and of Yemen's long term potential, we have concluded that human resource development should be the backbone of AID's program. Broad-based, basic education is the fundamental means through which economic opportunity can be converted to prosperity and prosperity into fulfillment of human needs. (Indeed, education is itself one of these needs.) Better educated males will have increased earning power in Yemen and abroad, and can make more intelligent use of the resulting resources. Remunerative employment opportunities for women will be more limited but still significant and growing rapidly. More important, translation of prosperity into need-fulfillment depends heavily on the quality of family care, especially maternal health and child care, including early learning. Thus, basic education for women provides a major leverage point.

The major thrust of the basic education program is the development and expansion of the primary education system. It is aimed at providing literacy, mathematical understanding and skills, basic scientific knowledge, (including health, nutrition and sanitation), work skills where appropriate, and socio-political modernization. The primary education system is viewed, if efficiently designed, as the least cost means of achieving broad-based, fundamental improvement in the quality of Yemen's human resources. This program thrust is directly in support of Plan objectives to increase opportunities for primary education. The total number of primary students is projected to grow from 252,500 in 1975/76 to 426,900 in 1980/81. The number of entering students is to grow 124%, boys by 9% and girls by 254%. Universal primary education is a 20 year goal for boys, 30 years for girls.

Within the overall objectives of this program, we would emphasize for equity reasons expansion of primary education opportunity for girls and for rural people in general.

There are constraints at nearly every point in the primary school system, with a possible exception in the area

of facilities. A number of primary schools have been built (although coverage by geographic and sex criteris is unknown), but are not yet operational due to the lack of teachers. A total of six Primary Teacher Training Institutes (PTTI's) are in existence or to be constructed in the near future. Although some work has been done by UNESCO on some components of the primary school system, a much larger critical mass of technical assistance needs to be applied in order to generate significant progress in it.

The basic components of our program to strengthen the basic education are these:

a. Pilot programs at the local level (beginning under the Local Resources for Development Project) to test and generate receptivity to primary education, especially for girls, to test appropriate design and cost-effective construction of facilities and to test forms of local organization and financial support for primary schools.

b. Programs in non-formal education, e.g., preparation of teachers for and support to existing programs for young girls not attending primary school and for illiterate women for whom classes are presently conducted in homes. These and other non-formal programs, including those at District Training Centers and Vocational Training Centers, should make maximum appropriate use of existing and potential mass-communications facilities, including satellites.

c. Strengthening of primary teacher training through assistance to pre-service and in-service teacher education and initiating a program for training primary teacher trainers.

d. Strengthening the Sana University College of Education.

e. Support for the still-nascent curriculum development program, including teaching materials, which are an essential part of the teaching/learning process.

f. Development of YARG capacity for educational planning and administration, in order to direct the system and make it work efficiently. Prospective planners and administrators should be selected from classroom teachers who have demonstrated insights and understandings in regard to the teaching/learning process and the needs of the

educational system. They must also possess potential for training in areas such as educational economics, planning and administration.

g. Strengthening the Sana University Faculty of Science, especially as it relates to the preparation of secondary school science teachers. (This is Project 0053)

We tentatively project the following levels of assistance in support of the above objectives by Fiscal Year:

($000)

	1978	1979	1980	1981	1982	1983
Basic Education	-	1,750	3,800	4,000	3,700	3,000

GOAL 2: Increase and restore the productivity of natural resources.

The basic rationale for this goal is that for the present, some 800,000 or 90% of Yemen's families depend in great part on agriculture for a living, and among these most certainly are some of the poorest people in the country. Even in the long term, the probability is that agriculture will still be the major sector of primary production. More broadly, the balance between people, land and water is precarious and deteriorating. Conservation and restoration therefore need early attention. AID's contribution to this broad goal must be in context of concern for welfare of the small farmer. As far as we know, there aren't many large farms in Yemen but, as noted below, the tenure pattern is a subject about which we need to know much more.

We see the following means of accomplishing this goal within an equity context.

1. Inventory and analysis of the resource base need vast improvement. Quantitatively and qualitatively, we know too little about the resources. Resource inventory and analysis will therefore inevitably be part of our program since they are so essential, even though the direct impact on people is very small. There is considerable, although generally uncoordinated, work being done by most donors in this area. We have two programs which fill essential needs not being met by other donors, i.e. Land Classification/Soil Survey, 0042 and Water Resources, 0043. Emphasis in the latter project is on building YARG capacity to continue the inventory program which is already 5 years old and on developing a mechanism for formulating and analyzing water-use policy alternatives. As a general principle, we would limit further AID involvement to resource inventory activities which are essential for planning development programs (e.g. fisheries, range restoration, forestry.)

2. More productive technology needs to be developed. As we have said, the possibilities for improvement in Yemen are substantial. Our present projects are aimed at products which give promise of being profitable to small-scale farmers: Sorghum-Millet Improvement, 0030, Horticulture Development, 0024, and Poultry Development, 0019. We would continue to follow this general principle. While more precise definition of research areas must follow initiation of the proposed Title XII relationship it seems clear that at least the following areas should have priority.

a. Irrigation methods. Water is a major constraint and a major cost. Conserving its use is an important objective.

b. Fertilizer response. It appears that soil and water conditions in Yemen are somewhat unusual and that research on appropriate fertilizer application may have a handsome payoff.

c. Range, dune and forest restoration. In order to retain and restore the productivity of these resources and in the very long range to restore the moisture cycle, research needs to begin now on adaptable plant species and other technology.

d. Increasing productivity of labor, including selective mechanization.

Given U.S. pre-eminence in agricultural technology research, and its probable high payoff in Yemen, we believe it will be a substantial part of our program well into the 1990's.

3. Economic and social analysis needs more emphasis. We know little about the economics of farming in Yemen. Land tenure, labor costs and marketing are major areas about which data are required in order to set crop research objectives and to design institutional interventions. Some of this analysis can best be carried out related to specific projects (e.g. poultry), but much of it may be more appropriately and effectively implemented within the Agriculture Sector Support Project, 0052.

4. Development of extension and support systems/institutions. With the exception of credit, the support systems for agriculture are embryonic at best: research, extension, education, marketing and storage, seed multiplication, cooperatives, etc. Donors have in fact carried on some of these functions without significant institutionalization. Research is a good example. Also, each of the various area rural development projects has an extension function, but the Ministry's capacity is essentially nil. However, the basis has been laid for these institutions, i.e. there are a number of Yemeni students in the process of obtaining agriculture science degrees, and they will return in relatively significant numbers in 1980 and 1981.

Development of support institutions is an area which will probably begin to see quickening donor interest. With UNDP/FAO suffering from lack of funds and IBRD being concerned mainly with central Ministry and basic research functions, we project a need for AID's assistance in this area, in which the U.S. has had considerable experience. Three functions which are of immediate interest are agricultural education, seed multiplication/distribution, and cooperatives.

a. In agricultural education, the first institution in Yemen to be developed (and the probable future University Ag Faculty) will be the post-intermediate, i.e. 10th grade +, agricultural school at Ibb. This school will provide the

essential middle level human resources necessary to man the entire sector, and we view assistance in curriculum and staff development as an important contribution to the entire sector.

b. Seed multiplication. This is the first-listed project in the Plan and is in an area in which the U.S. and AID in particular have had long experience. We have suggested it to the YARG as an area of prime interest, with the idea that private sector and cooperative organizations would play a major role.

c. A cooperative movement seems to be developing rather spontaneously. Obviously, we view this development with great interest and will assist in appropriate ways, if needed.

The above may appear to be a fairly standard approach to the agriculture sector, and indeed it is. However, some principles should be evident.

a. Self-sufficiency in food grains is not a profitable long-term alternative. While we cannot ignore food grains (they are still too important to too many people), more remunerative cash crops should receive priority.

b. The private sector, including cooperatives, seems to be more active and important in Yemen. We should give strong support to this tendency.

c. The precarious balance of people, land and water requires long-range programs with little visible impact or equity bias. Yet, in Yemen, this problem can be ignored at the expense of the country's only proven resource.

d. Capital-intensive technology is a possibility - in fact a probability - in comparison to most LDC's.

More precise definition of sector strategy and of AID interventions will follow initiation of project 0052, Agriculture Sector Support (Title XII). However, we visualize levels of assistance about as follows:

($000)

	1978	1979	1980	1981	1982	1983
Resource inventory and analysis	900	1,200	790	500	500	-
Adaptive research	1,215	1,690	2,265	1,659	2,000	2,500
Economical/social analysis (Title XII)	-	750	750	750	700	700
Support institutions	-	1,500	2,000	2,500	3,000	3,500
Total	2, 115	5,140	5,805	5,409	6,200	6,700

Goal 3: Expansion of our understanding of human needs and of local institutions through research and pilot programs, and development of institutions which can increase the availability of and equitable access to needed services.

The strategy behind each of our program goals is drawn with the rural population in mind. However, this goal deals more directly with more aspects of rural life than the others. Our strategy is based on three factors.

- Our knowledge of the social and economic status of rural people, although increasing, is still insufficient to support massive interventions.

- There are nevertheless some types of intervention which we are certain are needed, wanted and beneficial. Examples are more potable water and access roads.

- There are forms of local initiative, both traditional and new, which have promise of supporting a significant amount of development activity at the local level. Some financial resources are also available from zakat proceeds and remittances.

We expect to build our knowledge of rural socio-economic conditions and dynamics in two general ways. First, it is apparent that continued research is necessary. There is an increasing amount of anthropological research going on, and we have sponsored some of this. However, we are at a stage where the research needs to be more carefully directed at problems in which AID is specifically interested. For example, the economic aspects of village life have not been analyzed in sufficient detail. We propose, therefore, a new project, to be administered by the Mission, which will finance research specifically designed to illuminate problems faced by current programs or anticipated in future programs. The most urgent research need relates to remittances and migration and the unknown effects they are having on all aspects of the social and economic setting.

Second, we believe we can learn best and more quickly about, e.g., the capacity and needs of local institutions or the effectiveness of technological interventions simply by trying them on a pilot basis. Several projects reflect this type of action research.

There is nothing at all uncertain about some rural needs. A convenient source of potable water is one, and roads to provide access to markets and services is another. Three projects now being planned or implemented will help to expand provision of these and other facilities to rural areas. However, their primary purpose is not simply transfer of resources. In different ways each of these projects is intended to develop better technology, to encourage and test various modes of local cooperation and enterprise, and to determine the minimum necessary intervention and support through central government organizations and budget. Similarly, we are supporting a successful effort by Catholic Relief Services to train female health/nutrition educators. While a moderate level of PL 480 resources is used in connection with this program, widespread and substantial food programs do not appear to be necessary. (There is some basis for a program under Title III, but we are not projecting one at the present time.)

Looking at relative emphases over an approximate 10-year period, we can visualize three general stages of effort. For the first three years, emphasis will be on research, testing and base-building, testing technology; gaining experience with existing and new forms of local organization, initiative and financing, and pilot programs to train para-professionals and local development planners and managers. At an intermediate stage, work can begin more intensively on the institutions which are needed to expand the availability of such local development personnel and to plan and initiate programs to increase productivity and provide services in health, nutrition, etc. Regional planning must eventually begin, and can be useful at this stage. The stage of maturity falls beyond the 5 year horizon. At that time, we visualize a shift in emphasis back to regional and central government institutions which plan and coordinate broad-based action programs and which supply leadership and technical capacity to local organizations.

This program goal is not clearly separated from the others, nor should it be. We think it is useful and necessary because it provides a way to ensure that programs aimed principally at the other goals maintain their focus on ultimate beneficiaries, and are planned to make maximum and effective use of local institutions in the process of transferring benefits. In this way, we hope to ensure that all of our programs impact on intended needs and intended beneficiaries.

We tentatively project the following levels of assistance in support of the above objectives by Fiscal Year:

($000)

	1978	1979	1980	1981	1982	1983
Research	-	500	250	250	250	250
Testing, pilot programs, etc.	210	4,598	4,445	6,103	4,785	4,700
Training Institutions	438	250	-	1,000	2,000	2,000
Title II	250	500	500	500	500	500
Total	898	5,848	5,195	7,853	7,535	7,450

GOAL 4: Development of the policy making capacity and expansion of capability to plan and manage an accelerated flow of foreign and domestic resources into development programs and projects, with emphasis on areas having impact on basic human needs.

As has been made clear, indigenous capacity for policy-making, planning and management are understandably thin at this stage of Yemen's development. In sectors where we plan more extensive programs, i.e., education and natural resource development, we have vehicles for providing support for these management functions in the short term. In other sectors, our approach is based mainly on training programs, through the Development Training II Project, 0040. As the YARG continues to articulate its institutional framework, we plan to make our training funds more focused on staff development for key institutions, existing or planned. For example, in view of the probable preponderance of private sector activity in Yemen, we think it important to develop the still embryonic Faculty of Commerce and Economics into an effective partner with the private sector. Initially, training grants would be appropriate means of support, but we can visualize the desirability of a more intensive institution-building approach. Similarly, a Faculty of Engineering is included in the Plan. The planned amount of construction during the Plan and probable levels in ensuing years supports this priority. We therefore think this planned institution is also important.

In our view, training programs are the most appropriate way to develop YARG management capacity in sectors and institutions impinging on BHN, but in which there is other donor or no donor involvement. For example, to lay the basis for the

population program which will no doubt become necessary and socially feasible some time in the future, we plan to increase our training support for demographic analysis and related subjects. In the field of health, WHO is the principal donor. However, we think that training for Yemeni personnel in health economics, health administration, and other aspects of public health programs can be of critical importance in ensuring that programs are technically and cost effective.

In a shorter time perspective, there is an immediate need to plan and implement projects for which outside capital is readily available. Many of the projects in the Plan are as yet no more than ideas and, since many of these require construction, feasibility and design work are essential. The YARG's capacity to handle the mountain of work involved is very limited, thus constraining the flow of available resources. We propose to begin building that capacity while at the same time giving more immediate assistance in project preparation, through Project 0056, Feasibility Studies. This project could be designed also to include advisory services which could be used by the YARG to analyse policy problems and present alternatives for YARG consideration. This is one way - although others are conceivable - to support in the relatively short term the efforts of those few government officials who are wrestling with major policy issues.

We tentatively project the following levels of assistance in support of the above objectives by Fiscal Year:

($000)

	1978	1979	1980	1981	1982	1983
Training	1,847	2,130	5,255	4,000	4,000	4,000
Feasibility Studies	-	3,500	500	500	2,500	-
Total	1,847	5,630	5,755	4,500	6,500	4,000

V. Administrative Criteria and Operating Costs

Operating costs in Yemen are related to price levels elsewhere in the Peninsula and can be expected to remain high. These costs can be held to a minimum by designing projects and implementing them so as to limit USAID support and involvement, by assigning first-class AID professionals to the Mission, and by limiting review and oversight and the related response costs to the minimum essential. We have been following certain administrative criteria in designing projects.

- AID-financed inputs should be provided through contractors or PVO's. This includes commodities, participants, local employees and everything else including general services support to contract employees. We have not reached this point, but progress is being made. The Title XII core group will be used as a vehicle for such support in the natural resources sector.

- Programs should be designed to limit USAID responsibility for detailed project design. Title XII provides a means for accomplishing this. A similar arrangement in the education/human resources sector is possible.

- Projects should be designed at levels of input that can minimize documentation, paperwork and meeting time. Relatively small projects, such as we now have in agricultural research, although they look neat to the outsider, are costly of USAID and AID/W time.

The higher levels of technical assistance recommended in this CDSS can be administered efficiently by a staff of 32 to 34 Direct Hire Americans, and at operating cost levels about 10% higher than the present FY 79 projection of $4.1 million. It is possible, however, once housing and maintenance problems are minimized and responsibility for implementing programs is firmly in contractor/grantee hands that the number of employees and related costs could be reduced to a still smaller, nuclear, AID Mission.

VI. (FY 78-83) PROJECTED FUNDING REQUIREMENTS
SUMMARY OF ACTIVE & PROPOSED PROJECTS
($000)

Project Title	FY 78	FY 79	FY 80	FY 81	FY 82	FY 83
FOOD & NUTRITION - Total	1,815	7,510	9,410	10,159	9,950	9,950
Goal 2-Poultry Development	415	240	-	-	-	-
Goal 2-Tropical & Sub Trop. Horticulture	200	450	535	-	-	-
Goal 2-Ag. Res. & Development (Sorghum)	600	500	730	159	-	-
Goal 2-Agriculture Research	-	500	1,000	1,500	2,000	2,500
Goal 2-Land Classif./Soil Survey	600	-	-	-	-	-
Goal 2-Support Institutions/Services (Seed multiplication/Ag. Education)	-	1,500	2,000	2,500	3,000	3,500
Goal 2-Ag. Development & Support	-	750	750	750	700	700
Goal 3-Mahweit RD (Phase II)	-	600	1,000	800	-	-
Goal 3-Local Research for Development	-	1,515	2,500	3,000	2,000	1,000
Goal 3-Appropriate Village Technology	-	955	645	200	-	-
Goal 3-Research	-	500	250	250	250	250
Goal 3-Training, Institutions	-	-	-	1,000	2,000	2,000
EDUCATION/HUMAN RESOURCES - Total	1,522	3,880	7,800	8,000	7,700	7,000
Goal 1-Teacher Training Teachers (TTT)	-	550	400	500	700	500
Goal 1-PTTI	-	500	600	500	500	-
Goal 1-SANA U.Faculty of Science (Curriculum Development)	-	700	800	1,000	500	500
Goal 1-SANA U.College of Education	-	-	500	500	500	500
Goal 1-Mass communications and non-formal education	-	-	1,500	1,500	1,500	1,500
Goal 4-Development Training	1,522	2,130	4,000	4,000	4,000	4,000
SELECTED DEVELOPMENT ACTIVITIES-Total	300	4,700	1,290	1,000	3,000	-
Goal 2-Water Resources Planning	300	1,200	790	500	500	-
Goal 4-Feasibility Studies	-	3,500	500	500	2,500	-

(FY 78-83 Projected Funding Requirements (contd)

Project Title	FY 78	FY 79	FY 80	FY 81	FY 82	FY 83
HEALTH - Total	973	1,778	1,555	2,103	2,785	3,700
Goal 3-Rural Water Supply	210	1,528	300	2,103	2,785	3,700
Goal 3-Applied Health/Nutrition	188	-	-	-	-	-
Goal 3-Al-Olofy Hospital	250	250	-	-	-	-
Goal 4-Water Systems Management	325	-	1,255	-	-	-
Sub Total	4,610	17,868	20,055	21,262	23,435	20,650
Title II	250	500	500	500	500	500
TOTAL	4,860	18,368	20,555	21,762	23,935	21,150