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YEMEN ARAB REPUBLIC
PRIME MINISTER'S OFFICE

Central Planning Organisation

STATISTICS DEPARTMENT

1975 MANPOWER SURVEY

Method, Assessment, Analysing And Results



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PREFACE

Government interest in manpower started at the first stage of planning. Among the main goals of the three year program for development was providing equal opportunities for work to all citizens, as well as, eradicating both unemployment and underemployment. Hence, it was inevitable to know its characteristics and distributions. Therefore, the idea of conducting a prompt survey arose.

Waiting for census results means that a long time will elapse before obtaining the required information.

In early 1974 an expert in manpower planning had been invited to make a study about the possibility of carrying out a prompt survey. In 1975, this survey was conducted and its results were assessed by ILO Experts in co-operation with specialists from the Department of Statistics.

We consider this bulletin as a starting point for provoking discussions on this vital subject: manpower, planning and setting-up long term policy for developing it according to future development requirements in Yemen. Consequently, the contents of this bulletin are primary views of the authors subject to subjective discussions.

For this purpose, a seminar will be held on this subject. Responsibles and specialists from the various governmental bodies, as well as, international experts will attend it to set-up a policy for manpower in Yemen.

All concerned are kindly requested to participate in this discussion and send their views and comments to enrich this seminar.

Thanks to Mr. Adnan Habbab, Statistical Adviser, who took the responsibility of translating and preparing this bulletin which is based on Manpower Survey, as well as, the report of ILO Experts.

Thanks to those who participated in the various steps of this survey.
Success God willing!

Minister of Development,
Chairman - Central Planning
Organisation.

DR. ABDUL K. EL - ERYANI

Sana'a, May 1976.

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PREFACE

The purpose of this report is to provide a summary of the findings of the survey conducted in the Republic of Korea during the period 1954-1955. The survey was carried out by the International Labour Office (ILO) in cooperation with the Government of the Republic of Korea. The results of the survey are presented in the following chapters.

The survey was conducted in accordance with the terms of reference agreed upon between the ILO and the Government of the Republic of Korea. The terms of reference were as follows:

To study the manpower situation in the Republic of Korea, with particular reference to the urban areas, and to make recommendations for the improvement of the manpower situation.

The survey was carried out in a number of stages. The first stage was the selection of the sample areas. The second stage was the collection of data. The third stage was the analysis of the data. The fourth stage was the preparation of the report.

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Ministry of Development
 Economic Planning Commission
 Seoul, Korea

Seoul, May 1956

1. Introduction:

Data on labour force by levels and structures is one of the fundamental information for development operations. At the time, developed countries have sufficient numbers of trained and skilful labour force, the majority of labour force in the developing countries are not skilful; besides, a high percentage is engaged in agriculture or other simple works, and even the middle and high-level need training. Therefore, the developing countries are in need of detailed information about the stock of manpower, namely middle and high levels. This will allow:

- 1.1. Establishing projects according to the available manpower.
- 1.2. Developing education and setting training programs for manpower required for the existing and planned projects.
- 1.3. Employing foreign experiences in the areas that lack local manpower till national expertise become available.

Obviously such goals can't be attained to, unless sufficient information about manpower become available for decisions' makers and planners.

2. Approach to the Survey.

As data on the stock is very limited and does not exceed industrial inquiries and other few surveys, besides, processing 1975 population census will take some time, manpower survey has been decided to be conducted to meet the urgent need for detailed data on manpower required for various development projects.

Mr. J.A. Socknat, the expert on manpower planning at Ford Foundation in Bahrain, was invited in July 1974, where he met many responsible and experts in the various government and international agencies.

In the light of these meetings, Mr. Socknat submitted a report in which he suggested an immediate manpower survey to be conducted.

The following factors were guiding his proposal:

- 2.1. Current and anticipated shortages of qualified high and middle level manpower are of greatest immediate concern to the Government. Virtually all high and middle level manpower are engaged by governmental agencies and private sector non-farm establishments.
- 2.2. Upgrading of the existing stock of manpower, especially in the public sector, is of urgent immediate concern to the Government. Fuller understanding of the nature and dimensions of the upgrading need are necessary.
- 2.3. Longer range high and middle level manpower requirements must be estimated as soon as possible because of the length of time necessary to produce such high and middle level manpower supply.

- 2.4. Correlation between manpower demand and education output requirements, however imprecise, must be attempted as an aid to setting targets for expansion of the education system. As a practical matter, such rationalization of education/training expansion in terms of manpower requirements is also necessary for education/training system expansion.
- 2.5. Any data collection efforts undertaken should be as economical, fast, accurate and informative as possible. Obviously balancing of these conditions is necessary.
- 2.6. Such funds as are required for carrying out such a survey to meet the above test are likely to be available from interested donor agencies, especially multi-lateral donors.
- 2.7. To rely on 1974 Census of Population results would be to fail to meet the test of immediacy. Release of detailed census results is scheduled for early 1977. The preliminary results of population scheduled for release in April 1975 will not include any data except population by governorate.
- 2.8. According to the different nature of both private and government sectors, it is suggested that each sector be dealt with alone and 1972 non-agricultural results to be taken as a frame for private sector.
- 2.9. August 1974 was suggested for the survey to be started.
- 2.10 Separate questionnaires for government and private sector were submitted together with the report.

3. Discussion of the report and financing the survey:

Mr. Sooknat's report, as well as, attached questionnaires were approved after being discussed. As human and financial efforts were devoted to population census, it was decided to postpone the survey to get a financial assistance from the U.N.

In January 1975, the U.N. approved financing this survey but all the staff were engaged in the population census preparation whose field works will start in February. Therefore, the survey was postponed again.

4. Revision of the Survey:

In late May 1975, the population census field works came to an end, the staff rejoined their work and it was possible to start again the survey. On the other hand, it was necessary to revise the basis of the survey in the light of the following factors:

- 4.1. A new frame became available through establishments census.
- 4.2. The students of statistical course were suggested to act as enumerators are not available as the course ended in November 1974.
- 4.3. The list of the governments' employees, at the civil service commission, became very old and getting informations by updating this list would double the work..

4.4. Few government agencies are able to give their employment plan for the future, especially for 1977-1981.

4.5. The new date for starting the survey was July 1975.

5. Instructions for Manpower Survey

Taking into consideration the above mentioned factors, the survey instructions were set up as follows:

5.1. Long-term objectives:

The overall objectives of the survey is to generate a data base upon which future manpower requirements may be imposed, as well as, develop machinery to maintain this data base to continually satisfy the needs of the country in its various stages of development planning.

5.2. Immediate Objectives:

The survey will provide instruments for human resources development planning through:

- 5.2.1. Determining current and anticipated shortages of qualified, high and middle level manpower.
- 5.2.2. Establishing the need for upgrading the existing stock of manpower, especially in the Public Sector.
- 5.2.3. Proving projections for long-range, high and middle level manpower requirements.
- 5.2.4. Prepare correlations between manpower demand and education output requirements.
- 5.2.5. Co-ordinate the efforts of key governmental agencies in order to enable the manpower survey to be carried out in a timely and efficient manner with favourable prospects of obtaining accurate results.

5.3. Coverage.

- 5.3.1. Geographical: The survey covered the establishments in the main cities; Sana'a, Taiz, Hodeidah, Ibb and Dhamar.
- 5.3.2. Economical: The survey covered all non-agricultural activities in the main five cities.
- 5.3.3. Sectorial: Both the private and government sectors were covered.

5.4. Method.

The survey covered all government agencies, as well as, establishments with five workers and more, by comprehensive enumeration, and by sample for establishments less than five workers. All industrial branches will be represented in the sample.

5.5. Conducting the Survey

The field work was carried out in July 1975. The results were tabulated manually in August and September 1975. These tables follow.

6. The assessment report and discussion.

- 6.1. In September of 1975, I.L.O. expert Mr. Sinclair arrived for the purpose of devising and writing the Manpower Assessment Report. This was done from mid September to mid January. An additional visit was made to the Yemen Arab Republic in November by Mr. Socknat to assist with the design and scope of the report.
- The report was submitted to the Government by I.L.O./U.N.D.P. in mid January.
- 6.2. A general discussion was held in the C.P.O. in January 1976, attended by representatives from:
- (1) The Ministry of Education.
 - (2) Development of Educational Programmes and Institutions Project.
 - (3) The Ministry of Agriculture.
 - (4) The Ministry of Social Affairs and Youth.
 - (5) Central Planning Organisation.
- 6.3. In that meeting it was decided that an expanded seminar should be held later in 1976 for responsables from various concerned Ministries, besides, experts and specialists, to set up a policy for the manpower in Y.A.R.
- 6.4. Experts of development of Educational Project have already submitted their comments on the report.
- 6.5. We enclose herewith the report and comments.

ASSESSMENT OF MANPOWER DEVELOPMENT AND POLICY AND
PROGRAMME SUGGESTIONS FOR THE YEMEN ARAB REPUBLIC, 1976.

Report to I.L.O./U.N.D.P. and Government of the Yemen Arab Republic

C.A. SIECLATH, I.L.O., Manpower Assessment Consultant
J. SOCKNAT, I.L.O./FORD FOUNDATION, Manpower Planning Expert

January 1976.

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SUMMARY

Every country has an endowment of resources, land, labour and capital. The Yemen Arab Republic has a relative abundance of labour and this resource is the concern of this manpower assessment.

Investments made in human capital through education and training have at least three aims:

- i) to improve and increase the cultural awareness of individuals.
- ii) to supply trained manpower at the appropriate level for the needs of the economy.
- iii) to raise the standard of living of the population.

In the Yemen Arab Republic, Modern Sector employment is limited and represents 6.4% of all employment. The large majority of the male workforce find jobs either on the land (50.3%) or abroad (42.6%). When considering an allocation of investments in human capital, Modern Sector requirements should have a secondary role to the needs of workers abroad or in agriculture. This is assuming that the pattern of employment and economic development remains similar to that found today.

Over the last five years little attention has been paid to the training needs of workers abroad or of agricultural workers. Formal education has expanded at an astounding pace. Little or no consideration has been paid to the appropriate levels of enrolment, given a small Modern Sector, nor to the quality of education. As a result, the quality and standard of education in schools is extremely low, a huge number of expatriate teachers have been imported to staff schools and University education has taken precedence over every other level.

At present, the educational and training system is producing huge numbers of illiterate students and University graduates. The fundamental pre-requisite of long run economic development, "functional literacy" is not being achieved.

The few vocational training institutes that exist are largely ignored by students, who intend to proceed to University and thereby hopefully obtain a good salary.

In short, previous investment in human resources has been

- a) wasteful,
- b) unplanned,
- c) inappropriate,
- d) detrimental to the economic development of the Yemen Arab Republic.

Educationalists and strategists should concentrate on the following points:

1. Improve quality of Primary Education by:
 - allocating the best expatriate teachers to grades 1-5;
 - raising standards of teachers through in-service training courses;
 - replacing unqualified teachers;
 - raising salaries and conditions of teachers.
2. Strictly limit enrolment in Post Primary education to the level appropriate to job opportunities in the Modern Sector.
3. Concentrate on Teacher Training Institutes and encourage Yemenis to train in them and to teach upon graduation.
4. Limit university study at home and abroad to a level indicated by job opportunities.
5. Adjust all education and training institutions to provide training for specific jobs. The only exception being a few "general schools" students.
 - "Modern Education"?
 - Adult literacy training?
 - Specific job training for migrated workers?
 - Agricultural skills training?
6. Give serious consideration to exactly what area of investment in human resources is the priority for the Yemen Arab Republic.

Summary of Current Status of Employment, Manpower, Human Resource Development and Projections of Supply and Demand.

1. Information Setting

When the project was first envisaged, there was a general lack of information necessary for the development of a Manpower Strategy. Amongst other more or less essential items of information not available were relevant data on the population. There was no information on the age-sex structure, nor a break-down by yearly ages of school children. There was no information on migration of Yemeni workers abroad, their duration of stay, acquisition of skills, pay, conditions, remittances etc., all of which have a considerable impact on the domestic economy. There was also no information on the employment characteristics of the Public Sector employees and only extremely fragmentary data on the Private Sector employment could be identified. There was generally total absence of data on employment in the Rural Sector. Educational Statistics were limited to total enrolments, with no information on "Drop Out" or "Repeaters" rates, and only partial information on anticipated future developments existed. No centrally controlled body of data on study abroad was available. Consequently, no estimate of student flow through schools and training institutions was existant. While a widespread demand for "high" and "middle" level manpower was experienced, no statement of the exact shortages of labour or the future demand has been made. The proposed Five Year Plan, as yet unwritten, will presumably state this in greater detail. However, no co-ordinated statement, either of future development programmes or the manpower demand of the same, was existant.

In short, the basic data pre-requisites to an assessment of the supply of labour and the demand for it, were missing. As a result, there was no coherent Manpower Development Strategy.

2. Strategy and Approach of the Manpower Assessment Project

2.1. Overall Objectives.

The contours of the development problems and strategy of the Yemen Arab Republic are fairly clear. Given the demographic profile and resource endowment of the country, the long-term development priority is, almost without question, rural development and agriculture. However, in the Three Year Development Programme there is considerable emphasis for the short-to-medium term on infrastructural development efforts (including human resource development) and on the administrative structure. Both of these are pre-requisites to further articulation of the development programme, so far, has been that manpower bottlenecks delay and impede the implementation of basic development projects.

Hence, the most useful contribution of the Manpower Assessment Project (referred to hereafter as "the project") seemed to be an assessment of short-term high and middle level manpower demand in the modern sector, and a medium-term assessment of supply. In this way, attention would be directed to solving the immediate problem of Manpower Bottlenecks, and also an input would be made into thinking for longer term strategies.

2.2. The Practical Constraints and Approach Adopted

As the Central Planning Organisation (C.P.O.) was in the process of administering and processing a comprehensive population Census, it was neither practical nor possible to initiate a separate Household Survey to examine the total Labour Force, or Labour Force Participation Rates (by sex), Employment, Under Employment etc. The limitations of the time of the project staff and the C.P.O. enumerators together with budget constraints excluded the possibility of a rural non-farm urban establishments and Public Sector employment. The preliminary Census results provided a frame of private sector establishments by size, and a comprehensive enumeration of establishments with 5 or more workers was made, and a 10% sample of establishments with 4 workers or less was taken.

2.3. Objectives of the Survey

To fulfill the aims stated in 2.1, a minimum of data was required from the Survey. Namely, the characterisation of the employed stock of manpower in (a) modern sector non-farm private sector establishments in urban areas, and in (b) the public sector. In addition, on a Ministry by Ministry and Development Project by Development Project basis, data on public sector manpower requirements were necessary.

2.4. Data Collection

In May of 1975 a Sample Survey of Private Sector Establishments was made to elicit information on the employment characteristics of the Non-farm Modern Sector. In August and September, a Survey of all Ministries and all Development Projects was made to estimate current and future manpower shortages.

3. Overview of Employment and Manpower

3.1. Labour Force

It was found that the number of active males and females in 1975 was 1.4 million and 0.6 million respectively. Total employment in the Non-Farm Modern Sector was found to be 50,180 persons, divided between the Private Sector, 58.5% and the Public Sector, 41.5%.

Table 1.1 shows that in the Private Sector "Wholesale and Retail Trade" and "Community and Personal Services" accounted for 62.6% of all employment. It is clear that Modern Sector Non-Farm employment opportunities are extremely limited. Of the entire male work-force, only 6.5% are found in modern "core" employment and 93.4% (1.1 million) are found either in agricultural employment or abroad. As a result of the fact that for every fifteen labour market entrants, only one may work in the "modern sector", the needs of the remaining fourteen (93%) must take priority in an overall Manpower Development Strategy. Moreover, the development of education and training must be re-appraised in the light of the very limited employment opportunities for educated manpower.

Modern Sector Non-Farm Employment, By Sector and for Government, 1975.

Economic Sector	Number	%
Agriculture	200	0.4
Mining and Quarrying	51	0.1
Manufacturing	8,473	16.1
Electricity Gas and Water	870	1.6
Construction	7,950	15.1
Wholesale and Retail Trade	27,570	52.3
Transport Storage and Communications	1,047	2.0
Finance, Insurance and Real Estate	1,126	2.1
Community and Personal Services	5,422	10.3
Total	52,709	100.0
% of Grand Total		58.5%
Government	37,471	
% of Grand Total		41.5%
GRAND TOTAL	90,180	

4. Modern Non-Farm Sector

All Private Sector establishments in urban areas with five or more workers and 10% of all establishments employing four persons or less were enumerated in the Manpower Survey. All Government bodies were enumerated and a separate questionnaire was used to elicit information on the future manpower requirement of Ministries and Development Projects.

4.1. Private Sector

The Manpower Survey found 33,090 persons (70.4%) employed in establishments with less than five workers, and 13,860 persons (29.6%) in establishments with five workers or more.

Also, it was found in the initial survey results that "Wholesale and Retail Trade" and "Community, Personal and Social Services" accounted for a large majority of employment. This distribution is a characteristic of many developing countries in an early stage.

In the Private Sector, the work force appears to be relatively untrained, and few persons possess the training or education which their occupation would normally require.

The age distribution of the work force in the Private Sector shows a relative absence of persons aged "25-44", suggesting that it is persons in this age range that seek work abroad.

2. Public Sector

By far the largest Ministry in terms of employment in the Yemen Arab Republic is the Ministry of Interior, with 11,512 employees which represents 22.6% of all government employment. Next largest is the Ministry of Education with 4,301 employees (13.7%) and next the Ministry of Health with 2,199 employees (7.0%).

The age of government employees tends to be greater than for workers in the Private Sector, perhaps reflecting the more conservative recruiting practices of the Ministries.

Women account for 3.6% of all government employees and are found principally as teachers, nurses and cleaners.

As in the Private Sector, many Public Sector employees do not have the requisite education or training that their occupation presumably requires.

5. Human Resource Development

5.1. Educational System

5.1.1. Schooling: The pattern of schooling found in the Yemen Arab Republic is common throughout the Middle East, six years Primary is followed by three years Preparatory, which is followed by three years secondary.

At every level there are more boys than girls, who overall, are outnumbered by 48:1. The "educational pyramid" is a relatively steep one, there being 46 Primary school enrollees for every one Secondary school enrollee. This is not so much the consequence of selectivity in examinations, but the poor retentative ability of students, most of whom drop out after two years Primary schooling. Graph 1.1 shows the number of boys in each level of education in 1974/75, and also illustrates the alternative types of study.

5.1.2. Teachers: Of the 6,614 male teachers and 435 female teachers, 5,286 and 325 are Yemenis respectively, working almost without exception in the Primary level.

Unfortunately, the majority of Yemeni teachers are underpaid and under-qualified. In the Primary level where most teachers are Yemenis, salaries are occasionally as low as Y.R. 150/month. Often, teachers in the first and second grades of Primary schools are "drop outs" from the fourth or fifth grades of the same. There is little cause to believe that the situation will shortly improve, as there are many more attractive career alternatives for able students than teaching.

5.1.3. Quality: Looked at from almost any point of view, the quality of education in the Yemen Arab Republic is, at this time, poor. From every 1000 boys who enter first grade Primary, 127 are likely to emerge six years later, and 138 will complete four years of education and achieve, presumably, literacy. This fact, taken together with the number of children who do not go to school, suggests that a basic pre-requisite of development, literacy, is not being achieved by the schooling system.

5.1.4. Levels of Education: The primary level has trebled enrolment in four years for boys, and doubled in the same period for girls. Despite the large numbers in Primary schools, the overall level of wastage is high and a large number are repeating years. The actual output is, as a result, very small.

There has been a tendency up till now to take any Primary school graduate into Preparatory and Secondary. However, there have been very few Primary school leavers available. After the Secondary school, in recent years, almost every male graduate has gone abroad for further study. Somewhat surprisingly, total enrolments in University are high and labour market entrants with Preparatory or Secondary schooling are relatively few.

5.1.5. Sana'a University: In 1974/75 1,460 students enrolled, 1,213 of whom were Yemenis, 89 of those being "full time". 67 women were enrolled in the same year. There are four faculties, Arts, Science, Law and Sharia and Commerce. Science is least popular, with Arts and Commerce more common options. Amongst the Faculties exists a Department of Education and it is hoped that future teachers will emerge from the University eventually.

Unfortunately, the academic year is periodically interrupted by Censures, holidays, elections etc., as the students of the University represent possibly the only cadre of educated manpower available for such work as enumeration etc. It is thought that more able students travel abroad for University study.

5.1.6. Specialised Education and Training: The Health Manpower Institute offers training to Primary and Preparatory school leavers in Para-medical professions. The status of the professions, the state of Ministry of Health finances and the level of pay have combined to make this type of training extremely difficult and there has been a dwindling of enrolment.

The Taiz Vocational Training Centre aims to prepare Highway Authority employees in relevant skills, namely automotive and heavy engine maintenance. As a result of a lack of equipment, only 24 employees have completed a 12 month "pre-apprenticeship" course. This centre is clearly well placed to accomplish a necessary and useful function and expansion and equipping are envisaged.

The National Institute of Public Administration is a training and servicing unit for the government. Relevant courses in all aspects of administration, including language training, are given. Recently Yemeni girls have enrolled in Arabic Typing Courses and it is hoped that this may be a channel for their further employment.

The Police College provides training for three years at the Secondary level for employees of the Ministry of Interior. More advanced employees and officers are sent abroad for specialised training.

- 5.1.7. Non-formal Education and Training: Kuttab schools represent the most common experience of education of the work force. In the more remote areas they still function but the Ministry of Education, with foreign assistance, has provided modern schooling in most of the significant rural centres. The kuttab school is consequently less prevalent than it was previously.

Less common now than say five years ago, is the practice of passing job skills from father to son. Modern schools and training institutions have curtailed the prevalence for this means of training, though it is still found in rural areas.

- 5.1.8. Pipeline Projects: Beside a variety of new schools and training institutions an I.B.R.D./U.N.E.S.C.O. team is making a major input into the structure, nature and quality of education. The educational system, after their contribution, will appear as shown in Graph 1.2. Girls' education will be the same, except there will not be the option to study in Agricultural, Commercial or Technical Secondary schools.

6. Projections of Manpower Demand and Supply

6.1. Demand

Public Sector: All Government bodies and Ministries were enumerated to elicit information on future Manpower Demand by occupation in the period 1975-1980. In addition, all development projects were assessed to estimate future manpower demand deriving from them. An item was added to the total Manpower demand to account for those persons dying or retiring between 1975 and 1980.

Private Sector: From the information obtained in the Manpower Survey, the Stock of Employment in 1975 by Occupation and Economic Sector was available. Each economic sector was taken and a growth rate of total employment over the period 1975-1980 estimated. Manpower demand was estimated by subtracting the total employment in 1980 by occupation from the total employment in 1975 by occupation. The additional demand for labour by occupation from 1975-1980 was calculated. An item was added to total demand to account for persons dying or retiring over the period. The additional job opportunities in both the Public and Private Sectors were summed into one of eleven occupational categories. Each category possessed a smaller education or training background. Graph 1.3 shows the total number of job opportunities divided between the public and private sectors.

6.2. Supply

Two "sets" of educational structures and systems were constructed. Set One was designed in every respect to correspond to exactly what will happen in the educational sector of the Yemen Arab Republic unless radical change is undertaken. Hence it will be possible to judge if, given current developments, education is developing in the most useful way for the overall economic development of the Yemen Arab Republic.

Set Two was constructed as a model for the Yemen Arab Republic which is closely related to actual job opportunities and the manpower required for the short-to-medium term economic development of the Yemen Arab Republic.

A labour market potential supply was obtained from the two models of education by tracking the final outcome of every student who enters the system, and entering him into the work-force under the appropriate occupational group in the year of his entry.

As "Set 2" was designed to be a more appropriate educational system for the Yemen Arab Republic and since five years is too short a period to observe the effect of educational changes, both Set 1 and Set 2 were estimated over fifteen years. A labour supply was estimated in each Set for the periods 1975-1980, 1981-1985 and 1986-1990. Hence it is possible to see the consequences for the labour market of a different educational/training strategy. The educational attainment of labour market entrants is shown under the two conditions on Graph 1.4.

6.3. Manpower Demand and Supply

Manpower Demand: The job opportunities that become available between 1975-1980 divide between those in the Public Sector and those in the Private Sector. Graph 1.3 shows the division visually.

Of the 12,952 job opportunities identified in the Public Sector 57.1% required Secondary completion or more and 95.6% required Preparatory school completion or more. Many of these job opportunities are not annually recurrent, representing a once and for all expansion of the Ministry. The additional job opportunities arising from the Public Sector should be seen as relating to a period of approximately 15 years.

A smaller proportion of job opportunities in the Private Sector require some post secondary education compared with those in the Public Sector: 5.9% and 26.3% respectively. However, 62.0% of job opportunities require Preparatory or Secondary school completion.

The job opportunities in this sector do represent approximately those jobs which will recur every five years or so.

Of the 4,311 job opportunities which require some Post Secondary training or education 78.8% of them are found in the Public Sector. The majority of these jobs represent opportunities which will exist up till approximately 1990 with only very small annual net additional job opportunities.

Manpower Supply. Two projections of Manpower Supply were made termed "Set 1" and "Set 2". At the risk of boring the reader with a re-statement of the nature of these two, an outline is given here.

"Set 1" represents the supply of labour over the three five year periods, 1975-1980, 1981-1985, 1986-1990, assuming that the general direction and nature of these two, an outline is given here. emphasis in education and training remains exactly as it appears at present.

"Set 2" represents the supply of labour over the same period but adjusts the emphasis in education and training to accord with three objectives. First, qualitative and quantitative educational development should be linked to job opportunities. Second, the Yemen Arab Republic should aim to be self sufficient in teachers by 1990. Third, recognizing the limited job opportunities in the modern sector and that most people in the Yemen Arab Republic gain a living from the land, education and training should be orientated to creating a functionally literate work-force. This would facilitate rural development, thereby raising the standard of living of 90% of the Yemen Arab Republic's population. Also, it would create the opportunity to provide vocational training in specific occupations. A large proportion of the male work-force of the Yemen Arab Republic spend some time in Saudi Arabia. As the demand for the most basic skills (mostly employed in construction) in Saudi Arabia decreases as infra-structural investment diminishes there, Yemeni workers penetration of the Saudi labour market may come to depend more on the skills they can offer rather than their capacity simply to labour.

Under Set 1 conditions (the most likely given present developments), the number of University graduates increases dramatically and in the period 1986-1990, 73.3% are illiterate.

Under Set 2 conditions the number of graduates remains relatively constant over the period, as does the share of "literate" rises to 19.1% and the share of "illiterate" falls from 90.1% to 16.6%. This is achieved by strictly limiting post-primary enrollments to levels corresponding to actual job opportunities, thereby improving the quality of education and by directing educational investment towards improving the quality of Primary education.

These two alternative approaches to education and training create total enrollments illustrated on Graph 1.5. Evidently total enrollment is much lower in the Preparatory and Secondary level under Set 2 and higher in the Primary level. To accomplish this increase in Primary School enrollments, new entrants do not change but the retention rate improves.

Graph 1.6 shows the difference in enrollment in 1985/86 at each level of education including University by grade. Both the improvement in the Repeater Rate in the Primary level and the better retention of entrants also in that level can be seen easily. Also, the radically limited post-Primary enrollments are evident.

6.4. Demand and Supply Analysis:

Graphs 1.7 and 1.8 visually show the resolution of Demand 1975-1980, and Supply 1975-1990 under the two alternative approaches to education and training. It is important to note that to a certain extent, supply should be summed over the period 1975-1990, as demand, in part, applies to that time also.

6.4.1. Professional and Sub-Professional Occupation.

If the analysis of the nature of demand made earlier is correct, then for Occupational Groups "A" and "B", Professional and Sub-professional Occupations the supply of Manpower in the periods 1975-1980, 1981-1985 and 1986-1990, should be summed to know if supply roughly matches demand.

Graph 1.7 shows very clearly that there is a severe imbalance in "Demand" and "Supply" for Professional and Sub-professional Occupations in the short run and an excessive one in the period 1980-1990.

Graph 1.8 which shows supply under Set 2 reflects a more even balance of "Demand" and "Supply" in those two Occupations, if the "Supply" in the three periods is summed.

6.4.2. Skilled and Semi-skilled Occupations.

Taken together, the job opportunities available are filled under Set 1 conditions by 1985 and an excess supply build up after that time. Under both Set 1 and Set 2 conditions, there is a shortage of persons with Secondary School completion. Under Set 2 the supply of persons in the period 1975-1980. However, this would create an ideal situation for upgrading and providing additional training to Preparatory school graduates for specified occupational shortages in the "C" occupational category. As has been noted before, it is always easier to provide additional training for specific jobs than it is to create employment for over-qualified manpower.

6.4.3. Jobs which require literacy or less.

Clearly the job opportunities for persons with literacy or less are very limited in the modern sector. As most entrants to the work force with these characteristics will seek work in the rural areas or abroad, what is important is how many are literate. Under Set 1 conditions, the number of illiterates entering the work force is increasing rapidly. Under Set 2 their number is falling.

7. Manpower Bottlenecks

While the shortage of Highly Qualified Manpower is a common experience at this time in the Yemen Arab Republic, the relatively large number of students studying abroad and the relatively small number of Modern Sector job opportunities means that by 1980 there will be, in numerical terms, an approximate equivalence of Demand and Supply in Professional and Technical Occupations presumably requiring a Science/Maths based University degree and a surplus of supply of graduates with Arts based degrees. In the "A-1" Category, by 1980, there is a small surplus of 56 graduates; in the "A-2" Category there is a surplus of 1,762 graduates.

Having presented the global picture of approximate parity of "Demand" and "Supply" for "A-1" type jobs it is the case that within that group surpluses and shortages exist within specific occupations.

In particular, there would seem to be a shortage of certain types of engineers and a surplus of economists. In the view of the project staff the problem of "Manpower Bottlenecks" remains an extremely important one which warrants closer attention. In particular, it requires (a) the visiting of individual Ministries on an annual basis to record the program made in filling occupational shortages, (b) a continual monitoring of returning graduates and (c) a careful control of the very important and time consuming exercise.

8. Medium Term Strategy

The Yemen Arab Republic stands at a critical point in its economic and social development. If the emphasis and direction of education and training institutions remains unchanged, then it commits itself to a serious "educated unemployment" problem, which will be manifest in five years time. Moreover, her educational system and training institutions will not accomplish the fundamental pre-requisite of long run development, a functionally literate work-force. By expanding Primary School education at an extremely rapid rate, the Yemen Arab Republic has begun to travel down the road of modern education. "Modern Sector" employment is limited and likely to remain so for at least ten years. What happens to children in Primary schools and how many are permitted to travel up the educational system is still an area where change and reform can be implemented.

If the experience of third world developing countries has produced any lessons for others to gain from, a few fundamental ones might be stated as follows:

- 8.1. The development of modern Preparatory and Secondary Schools does not lead to automatic economic development. In fact, it usually engenders in pupils a wish to seek modern sector urban employment and encourages rural to urban migration.
- 8.2. The development of a University and the peering of an educational system to University study usually leads to large scale unemployment of graduates in urban areas. Examples of countries where this has occurred are numerous, Egypt and India are but two well known ones.

- 8.3. Vocational and Technical schools have no automatic comparative advantage in preparing people for jobs over those who acquire skills through experience or "on-the-job" with related classroom instruction. On the contrary, they tend to act as a means for school drop outs to re-enter the educational system and possibly to obtain a University place.
- 8.4. In training people for specific jobs, there is no better way than to identify adults already engaged in similar occupations or relevant areas who are socialized to a particular life style and level of earnings whose expectations are limited, and upgrade or teach at that level.
- 8.5. A functionally literate work-force is perhaps the most single important prerequisite to long run sustained economic development. In a country where most of the population is engaged in agricultural occupation this is especially true.

9. Implications

9.1. Education

Set 2 was constructed as illustrative of an educational system geared to manpower requirements. The authors would not argue that Set 2 is definitely the optimal design for Yemen's educational system. However, it is believed to be a good estimate. Certain particular implications emerge from that model and some of them are as follows:

9.1.1. Enrolments.

Enrolments Post-Primary should be strictly controlled to the minimum necessary to meet the level of job opportunities. There should be relatively few "general" schools and these should be located mostly in urban areas. The effect of limiting enrolment in every stage in "general" education will be that only the best students are admitted and eventually a small cadre of the best students will emerge from the University.

9.1.2. Teacher Training.

The problem with teacher training at present is not one of a lack of physical training capacity. On the contrary, schools for teacher training lie largely empty in the Yemen Arab Republic. It is a problem of lack of student motivation and sufficient reward for effort. Two steps should be taken to improve this situation: (a) the stipends paid to pupils in teacher training colleges should be altered until enrolments have reached the levels necessary; (b) the structure of the career of a teacher must be improved to attract and retain Yemeni teachers. But, bluntly, this means yet another rise in pay, better conditions of service and better pension rights. To those who will immediately observe the apparent additional costs involved, the author would point out that if enrolments reduced, the number of teachers required will be less, that at the present relatively large salaries are paid to expatriate teachers and they could be transferred to suitably qualified nationals.

Thirdly, this investment in human resources represents possibly one of the most important in the Yemen Arab Republic. If funds are not available, donor agencies might be requested to sponsor a number of teachers.

9.1.3. University.

The problem with University study at the present and in the near future is that too many students are studying and graduating at too low a standard. A closer control of University study, both of the subjects studied and the numbers pursuing it which relates those two to the job opportunities is essential.

9.1.4. Quality.

Quality is of really crucial significance in the Primary stage. This stage is both the most wasteful in terms of resources and the only one experienced by the majority of school going Yemeni children. At present the Primary stage is not imparting literacy to 87% of every 1,000 boys who enter Grade 1. While the Primary stage should not be seen as a stepping stone to the Preparatory stage, it should provide a basic training in literacy. As a functionally literate work force seems to be a priority need for the Yemen Arab Republic, quality in the Primary level should be paid possibly more attention than any other educational problem.

9.1.5. Teacher Strategy.

A reversal of current practices of allocating teachers should be made. Rather than allocate the highly under-qualified to teach in the First and Second Grades of Primary, the best teachers should be sent there, and the less able teachers in Grades 5 and 6, i.e. the Post Literacy level. This may require directing the most able expatriate teachers to Primary Schools.

9.2. Training

9.2.1. Training for Occupations.

Several clusters of occupations with similar training/education requirements emerge as being in demand. For example, the para-medical occupations, teachers, technicians, motor vehicle mechanics, craftsmen for several trades, welders etc. A "Training Strategy" to meet the needs of either single important occupations, like teachers or clusters of occupations like artisans, plumbers etc. should be devised. The considerable accomplishments in vocational training by say the Chinese Technical School or the Health Manpower Institute have not been maintained past the training stage and resources have been wasted due to the lack of a training strategy. Such a "strategy", localised for each occupational group would first (a) assess the quantitative and qualitative need for manpower for a given occupational cluster,

(b) assess current training facilities and recommend amendment or addition where necessary, (c) act as a liaison between trainees and job opportunities by providing job availability information; ensuring that the job was related to training; ensuring that salary and conditions were approximately appropriate; ensuring that training is diversely important to determine that a position and salary would be given to graduates of a training scheme, if the identified job opportunity lay with the government. The experience of graduates of the Health Manpower Institute is in point here.

9.2.2. Adults versus Pupils.

When a demand for manpower is identified there is almost always an implicit choice between training adults and training school enrollees. The view of the project staff would be that for occupations which require manual dexterity or skills that can be acquired on the job, i.e. skilled and semi-skilled manual occupations ("M-2" and "M-2"), the appropriate strategy for the Yemen Arab Republic is that of training and upgrading adult workers. The proposed Algerian Adult Training Centre and the suggested Saudi and Libyan ones appear to be appropriate. One problem encountered in Adult Vocational Training is that much of it assumes a basic literacy. As this pre-requisite is lacking in 90% or more of the work force, Adult Training Centres may well be involved in literacy training prior to vocational training.

9.3. Economic Development Strategy

In devising a development strategy for the Yemen Arab Republic a variety of objectives and constraints are involved. Amongst the constraints experienced is a shortage of foreign exchange, capital, income, domestic infrastructure and administrative capability. Amongst the variety of development objectives of the Yemen Arab Republic, one which should at least be considered is employment maximisation. In the coming Five Year Plan, it is suggested that sectoral investments, new industries and their technologies should be studied in the light of their employment opportunities. Careful consideration should be given to the fact that the Yemen Arab Republic is relatively short of capital and has a relative abundance of labour. The "opportunity cost" on "shadow wage" of labour is somewhere between Y.R. 10/day (the wage of unskilled labour in the Yemen Arab Republic) and Y.R. 30/day (the minimum wage in Saudi Arabia). Moreover, the Y.R. 30/day is earned in foreign exchange but only part of it is costless labour and in making investment decision in the Yemen Arab Republic this point, often overlooked, is important.

A good example of the considerably different employment implications of different technologies is given by those used in construction in the Yemen Arab Republic. Usually, there are at least three alternative technologies which can be employed in a construction project, and the same number of design approaches, all with a different cost implication.

Different approaches to construction have very different economic consequences. "Stonework" construction generates additional local employment (e.g. quarrying) and redistributes income within the country and does not require the use of foreign exchange. Concrete construction does not generate employment beyond the immediate construction project, directs earnings to those supplying materials outside the country, requires foreign exchange and requires some skills not readily available in the local labour market.

9.4. Rural Development

9.4.1. Present situation.

From the analysis in the "Overview of Employment and Manpower" the small share of Modern Sector employment was evident. For most of the population rural development is the key to a better standard of living. While the efforts of the Ministry of Agriculture have been, and are, considerable, there is a need for a greatly increased effort to impart specific skills, training and optimal agricultural practices to farmers. So far, rural development efforts have reached a tiny proportion of those engaged in agricultural occupations. As the fruits of the Research Centres emerge, so will the need for a channel through which to pass their results to farmers. It is suggested that a network of Manpower Development Centres be created to assist in several ways with rural development. In particular, the aim of these centres will be to serve the needs of a large number of farmers.

9.4.2. Manpower Development Centres.

The authors see the Manpower Development Centres as having a crucial role to play in co-ordinating the overall Manpower Strategy of the Yemen Arab Republic in the modern and traditional sectors. In the rural areas, the functions of these centres would be (a) to provide basic skills training in identified problem areas, e.g. tractor maintenance, (b) to impart the knowledge gained from the Agricultural Research Centres, e.g. optimal cropping patterns, (c) to provide advice on optimal agricultural practice, e.g. water utilisation, (d) to act as liaison units between the central administrations and farmers by monitoring local problems, e.g. a diminishing water supply, by requesting advice on specific local problems from the Ministry of Agriculture experts.

The centres would be located in strategic rural centres, housed in low cost locally constructed buildings and operated by a staff of one or two secondary or preparatory school graduates. The aims of the centres in local areas would be to reach as many farmers as possible and provide the basic knowledge and skills for agricultural development. Adirable and essential as the present agricultural projects are, they tend to have been (a) expensive, (b) localised to one place. The forthcoming Agricultural Projects like the Livestock Programme and the Agricultural Credit Programme will require some medium to work through and these centres are seen as meeting that need. The graduates of the new Agricultural Secondary School would appear to provide a source of staff for these centres.

9.5. Migration

The prevalence of migration from the Yemen Arab Republic to countries abroad for employment is known to be extensive. Moreover, the significance of remittances for the balance of trade of the Yemen Arab Republic is also recognised. Little is known about the duration of stay abroad, the type of work obtained, if skills are acquired on-the-job or not, the use of remittances for domestic investment or personal consumption, the effect of migration on rural-to-urban migration in the Yemen Arab Republic. In short migration has a considerable significance for the development of the Yemen Arab Republic, and little is known about its impact.

In devising a Manpower Strategy for the Yemen Arab Republic some recognition of the changing patterns of the Yemen Arab Republic some recognition. To determine this and the current significance of migration for the economic development of the Yemen Arab Republic, more information is required than is currently available. It is suggested that steps be taken to remedy this data gap by a sample survey of the Yemeni work force abroad and the returnees at home.

Comments by: Abdel Basit Mohamed Ali Babiker,
Expert in Educational Statistics.

I was directed by the Project Manager to attend a meeting to discuss this report at the Central Planning Organization of the Yemen Arab Republic. I hereby submit my comments on this report after attending that meeting and after reading the whole report.

From the discussion with Mr. Sinclair at that meeting, it was evident that Mr. Sinclair was preaching for an adoption of educational policy which just meets the demand of manpower requirements. I think such policy at this stage of development of Yemen is premature and most harmful to educational development.

1. I conceive education as a means of changing the economic and social patterns of development of any nation. During this process through balanced planning many targets are covered. These targets cannot be broken down into small fragments in order to achieve a specific objective. Education is not a one factor element, it is a massive endeavour of changing the economy, social attitudes and in general mobilising the whole potentialities of the country towards new horizons.

No sane planner can frame an educational policy just for the sake of certain cadres of manpower. It is a false illusion to have few educated in an ocean of illiterate population, since skilled manpower cannot function in vacuum. So planning of manpower is expected to be an inseparable part of an over all development which entails economic, social, cultural and political aspects to give the country its own identity in development.

Having the appropriate number of required manpower with the rest of population left in the darkness of illiteracy will handicap proper deployment of this manpower at a later stage of development.

2. The authors of this report also recommended that future expansion of primary education should be stepped up since its output is very poor. They suggest that money invested in this type of education should be saved to be allocated for training special cadre according to job opportunities available in future.

I find this attitude most unacceptable since all countries, at present, are calling for compulsory primary education to harness illiteracy. Education is a social demand and nobody can dare and call for its non-expansion. If the content of primary education is poor other measures should be taken to introduce innovation in teacher training, curricula and audio-visual aids to improve its quality and to save wasted funds for its further expansion. Lessening the cost of primary education by using new methods in teaching, instruction etc. will give the educational authorities a more flexible hand in full utilization of resources for a paramount expansion of this level.

3. The authors also advised that steps should be taken to restrict enrolment in post primary and university studies at home and abroad just to the level appropriate to job opportunities in modern sector.

3.1. If we know that the Yemen Arab Republic is starting from scratch and that, at present, many jobs are occupied by very low calibre of personnel, this would be a ridiculous attitude. What ever graduates Yemen will have, this will improve the quality of personnel at the different levels and the more we have the better chance of selection will be, and accordingly the present posts occupied by semi-literate persons will be filled by better qualified manpower.

3.2. The authors recommended this restriction at post primary level because according to their calculations unemployment will take place in these so-called modern sectors in which the authors used crude ways of estimating future job opportunities. It is never an indicative measure of job opportunities in future if you just ask government officials in the different ministries about their future needs of personnel if there are no future plans or programmes set forward, as the authors themselves have admitted.

3.3. The authors have admitted that there are shortages in highly qualified manpower now but they emphasized that by 1980 there will be enough numbers to make equivalent of supply and demand in the professional and technical occupations with a slight surplus in Arts based degrees.

The authors have assumed that the economy of Yemen will be static up to 1985 and the present status quo of economic conditions will prevail till 1985. This is quite untrue and if we just take the past trend for three years ago, we will witness tremendous structural changes in the economy of the country in respect to productivity, occupational composition and technology.

4. Procedure Techniques and computations used.

- 4.1. In page 3.3, the authors stated that educational statistics of the Ministry of Education cover only "modern schools". These are defined as those which have teachers, books, curricula and inspectors supplied and approved by the Ministry of Education. This definition excludes the remaining kutab and koranic schools which exist.

But looking at table 3.24 the authors have forgotten their statement and included in the first grade of primary education the kutab schools in which a student can stay in one class more than two years. This has resulted in bigger error in following the cohort of students till graduation. In this way an incredible size of wastage is computed which makes the judgement on this level somewhat exaggerated.

To have a true picture of the size of wastage in primary education, it should be separated into two categories of modern schools and kutab and measure wastage for each of them separately.

4.2. Following the authors approach of the strategy of manpower assessment in their working paper No. 2 table 5, one finds that the rate of participation of the age group of male population 15-19 to be 0.85 in 1975. This rate decreases only by 0.05% for the coming ten years till 1985.

This means that despite the remarkable expansion in secondary schools, the educational system will not be able to improve itself to contain more than 0.05 of that population till 1985. Even if we consider the natural increase this rate is relatively small and hypothetical.

This rate could have been assessed in a better way if future projections of a positive factor of betterment of content to be matched by the natural increase of that age group.

4.3. The authors have selected 12 models for population estimates and in each model certain assumptions were chosen to account for under enumeration of female adults, male and female children, migration of Tunisians etc.....

There was no explanation for such assumptions and no interpretations were given for their basis. More astonishing was the selection of model No. 4 of the working paper No. 1 to be the most suitable. One would not be convinced, especially the model contains many ratios of missing population, magnitude of emigrants and their quality.

5. Conclusion.

The report contains so many hypothetical assumptions, especially, in the projections concerning manpower needs. I admit that there is a scarcity of data but this is no excuse to base fundamental issues on controversial criteria.

In my opinion this job is not a one-man job, and it needs a team like task force to study the strategies of development of the country, to survey all plans, projects and programmes and to co-ordinate them together to have an overall picture of the situation. Surveys need to be carried out on a wide scale to cover the gaps of essential data required.

Correlation of educational inputs and outputs should be worked out to manpower requirements bearing in mind a flexible perspective of balances in education to serve other goals of the society.

May I suggest at the end that the whole report should be revised by a bigger team of specialists in order to review these requirements on the light of real projects and plans of the different ministries and on the light of expected economic growth of the country. This could be a joint effort of the C.P.O., the Census Bureau, the Division of Educational Statistics at the Ministry of Education, the Ministry of Finance and specialists from ILO.

Comments by: Maher F. Abdalla
Non-formal Education Expert.

The report may have merits if we consider it as a look into the question of the Manpower Development in YRH, or as suggestions for methods of carrying out studies about it. But, for the reasons displayed below, it becomes disturbingly misleading if we consider it as a complete and in-depth survey upon which recommendations for designing an educational system or policy should be based.

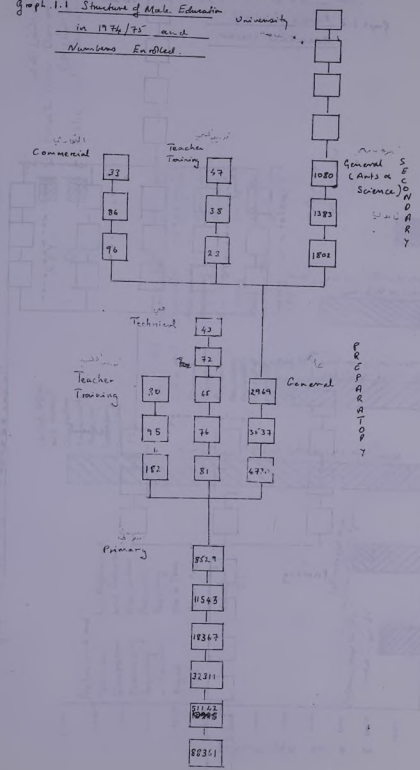
1. The report offers some educational recommendations that severely curtails almost all the educational activities of the country. They are presented as ways for supplying a manpower demand calculated for the years 1975 - 1980. This is a very short period to offer grounds for the establishment of an educational system or policy for a nation that is commencing a phase of high rate of change. By the time the educational recommendations are implemented and its output fed into the market, the period 1975 - 1980 would have completely or mostly gone and the educational output would be incompatible with the new demands for the new times.
2. Even for such a short period, the method used for calculating the demand, gave unrealistic and very insufficient results. The public sector demand is an estimation based on a questionnaire presented to 17 different governmental bodies assumed to represent all the sector. Without the existence of a real and comprehensive futuristic plan in the hands of the officials approached, they will naturally under-estimate their demands for future manpower. They will under-estimate it because they will not consider many of the new projects that will be adopted, even though not foreseen now, because they depend on factors external to the country. Many of the officials questioned, with their present concept of the work of their departments, its methods, quality, scope and functions, will fail to imagine the quality and quantity of the manpower needed for replacements and expansions necessary to form a modern administration highly needed by the country.
3. The results obtained for this sector are illustrated in the 2 tables, 4.20 and 4.21 of the report. The figure of 12952 is given as the total additional demand needed by the public sector till the year 1980. Out of these 12,952 officials, 9,265 are for the Ministry of Education alone, 4,893 primary school teachers and the rest as supporting and inspecting staff. Taking out the demand for this Ministry, we find that only 3,687 additional jobs of all categories are foreseen for all the rest of the public sector. A look in table 4.21 of the report will show the extreme under-estimation in all categories particularly in the higher leading ones.
4. For the private sector, the estimates are based on many questionable assumptions. If we consider these assumptions, and the discussion presented by the report (pages 4.5 and 4.17) about them, we note the following:

- 4.1. Page 4.5 para. 1 of the report assumes that no change will happen in the productivity, technology or composition of the labour force.
- 4.2. A 10% increase is calculated for the manpower involved in agriculture. A reasonable ratio if related to a realistic figure representing the total manpower engaged in the sector. Unfortunately, the report applies the percentage to a figure of 200 representing "total modern sector agriculture wage employment". This outrageously misleading choice, ignores completely the real farming manpower and the changes that are expected and needed in it and in those who would service it and those who would lead it for better methods, machinery, tool, marketing, co-operatives and community development, para (a) page 4.5.
- 4.3. For mining and quarrying, although the report admits the finding of quantities of gypsum, yet the need is calculated as nil. The report claims that it takes time (how much?) to organise the production. The report missed the fact that for this organisation and others, time is truly needed but also workers and specialists. In this sector, the report deemed the country not to have any other minerals (or oil) discovered or even looked for.
- 4.4. For manufacturing, it is with a shock that one reads in para. (c) page 4.6 of the report. "In fact, there is a case to be made out for the YAR to avoid industrial and manufacturing development." The report contributed this advice because of the "high social cost involved", the "untrained state of the labour force" and the "starting and incomplete infrastructure". After signaling these factors, the report takes the negative attitude of leaving everything as it is and making a case against industrial development, ignoring the efforts, and clear desire of the country to change these situations including the building-up of the infrastructure and the training of the labour force.
- 4.5. If we continue with the same chapter (4. Demand for the private sector), we can see how the methodology utilized, or rather the assumptions put are reducing the possibilities of progress in all sectors. Upon applying the same methodology on the construction sectors, the authors themselves were shocked to see their results in estimating the manpower engaged presently in the sector. They found it to be much lower than anything expected in Yemen or any of the countries of the region, (Para (e), page 4.7). To remedy this, the authors discarded their finding of 0.6% of the labour power to be involved in that sector and used an arbitrary ratio of 15%. The increase in the ratio did not help much since it was, like in the case of farmers, applied to a very small whole i.e. that described as "all modern sector employment". A 2% per annum increase was calculated for the labour power of the sector, claiming that electricity, water and many other factors will not change or advance.

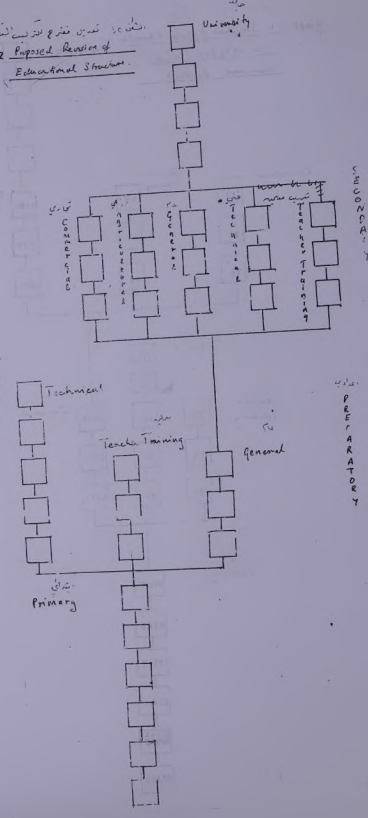
5. In calculating the wastage in manpower for both the public and private sectors, the report took into consideration only 2 factors; death and retirement. The report thus ignored the migration factor which, though may increase the income of the country, taxes enormously its manpower.
6. In calculating the demands for most of the sectors, no considerations were taken for the replacement of existing non-Yemeni workers. When this important factor was mentioned for some sectors, it was enormously under-estimated. The table 4.105 page 4.37, estimated that in 1975 all the non-Yemenis, in all occupations in Yemen are 266, while we know that teachers only in the Ministry of Education are about 1500. It is obvious that such a number will not be replaced by Yemenis in the next five years, but ignoring such a factor is very misleading in putting education policy for any period in a nation's history.

The column "Total Net Job Opportunities 1975-1980" of the same table, 4.105, represents the report estimate for the additional demand that should be supplied by the educational/training systems for every occupation. A quick consideration of this column will show many examples of the clear under-estimations of the demands.
7. The report neglected many other demands needed by any nation, especially one in the condition of YAR. It ignores all the demands concerned with the general enriching of the culture of the nation, the formation of an educated core from artists etc, would evolve and give the nation a cultural life that is as necessary as the productivity and for the productivity Table 4.20, page 4.50, for example, shows no soft ware or any programme makers for the Ministry of Information, only from the desire of any nation to raise the general standard of education of all the job holders, as well as, those without any jobs such as women at home. Without the educated masses, a modern sector job holders will always remain alien to the community. Bringing to the masses the light of some basic general education at least to a primary level, must be a target for all educational planners for Yemen now.

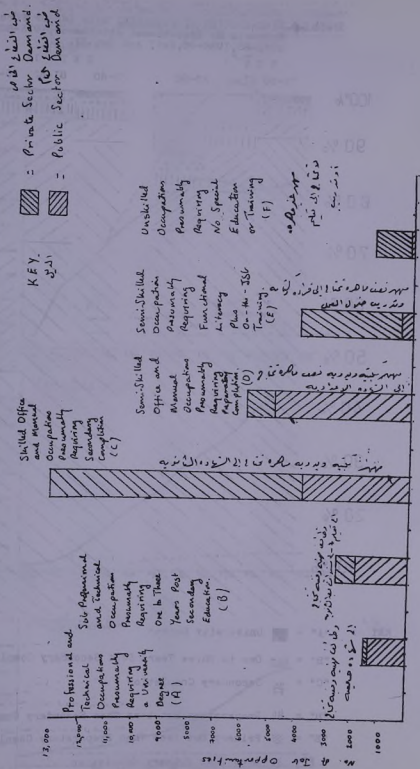
Graph 1.1 Structure of Male Education in 1974/75 and Numbers Enrolled



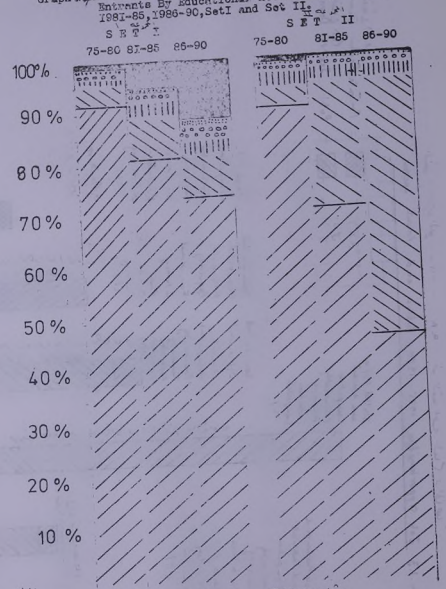
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 Graph 1.2 Proposed Revision of Educational Structure



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 Graph 1.3 Job Opportunities, 1975-1980, Public and Private Sector

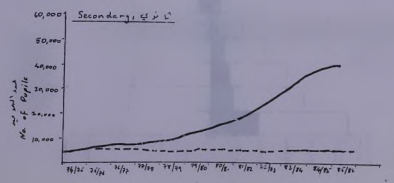
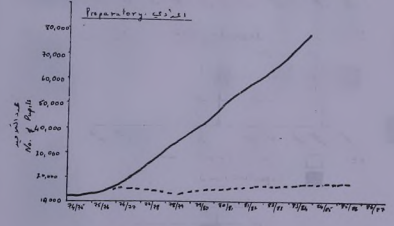
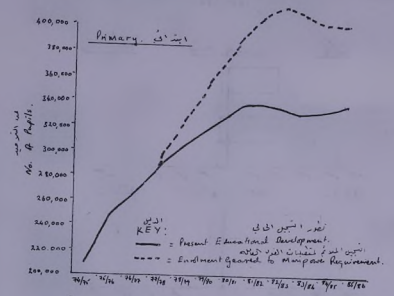


Graph 1.5
 Distribution of Potential Male Labour Force Entrants By Educational Attainment, 1975-80, 1981-85, 1986-90, Set I and Set II

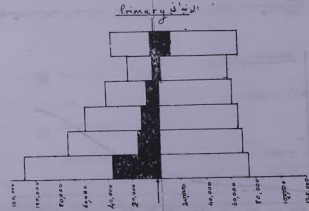
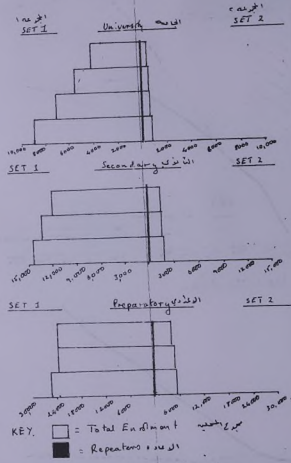


- البيان
 KEY : "A" = University Degree
 "B" = One to Three Years Post Secondary Completion
 "C" = Secondary Completion
 "D" = Preparatory But Less Than Secondary Completion
 "E" = Primary But Less Than Preparatory Completion.
 "F" = Less Than Primary Completion

1.5
 Graph 1.5
 Educational Development in Schools According to Present Requirement



الطلب على التعليم في الجمهورية العربية السورية حسب المراحل التعليمية (الجمهورية العربية السورية)
 Graph 1.6 Male Enrollment in Schools and Universities
 By Grade, According to Present Development (SET 1)
 And With Education Goals to Meet Requirements (SET 2), 1975/76



الطلب على التعليم الاحاط به 70-80% من العرض للاعوام 70-80% والطلب للاعوام 80-70% والطلب للاعوام 80-70% والطلب للاعوام 80-70%
 Demand 1975-80, and Supply 1975-80, 1981-85, 1986-90, SET 1

الطلب على التعليم الاحاط به 70-80% من العرض للاعوام 70-80% والطلب للاعوام 80-70% والطلب للاعوام 80-70% والطلب للاعوام 80-70%

Sub-Professional
 Occupations
 Requiring One
 Year of Post-Secondary
 Education.

Skills
 Occupations
 Requiring
 Completion
 (70%)

Semi-Skilled
 Office and
 Assembly Occupations
 Requiring
 Completion
 (75%)

Unskilled
 Occupations
 Presumably
 Requiring
 Literacy
 (75%)

Occupations
 Requiring
 Education or
 Training (75%)
 او التعليم الاحاط به 75%

45,000
 40,000
 35,000
 30,000
 25,000
 20,000
 15,000
 10,000
 5,000

45,000
 40,000
 35,000
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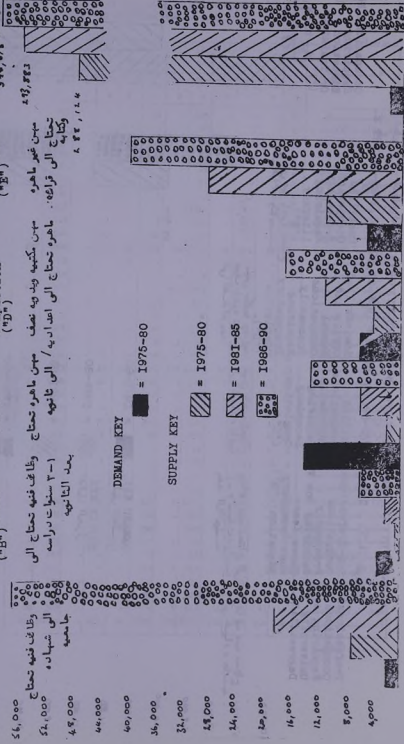
45,000
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45,000
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 35,000
 30,000
 25,000
 20,000
 15,000
 10,000
 5,000

DEMAND KEY
 ■ = 1975-80

SUPPLY KEY
 ▨ = 1975-80
 ▩ = 1981-85
 ▪ = 1986-90



الطلب الإجمالي للقطاعات الحكومية والقطاعات الخاصة
 Graph 1.8 Demand 1975-80 and Supply 1975-80, 1981-85, 1986-90, SEM 2.
 Demand 1975-80 and Supply 1975-80, 1981-85, 1986-90, SEM 2.

Occupations Not Requiring Education Or Training (F) (مهن لا تحتاج إلى التعليم أو التدريب)

Unskilled Occupations Requiring Literacy (U) (المهن غير المهيكلة التي تتطلب معرفة القراءة والكتابة)

Semi-Skilled Occupations Requiring Presumably Preparatory Education (S) (المهن شبه المهيكلة التي تتطلب التعليم التحضيرية)

Professional Occupations Requiring One To Three Years Degree (P) (المهن المهنية التي تتطلب درجة واحدة إلى ثلاث سنوات)

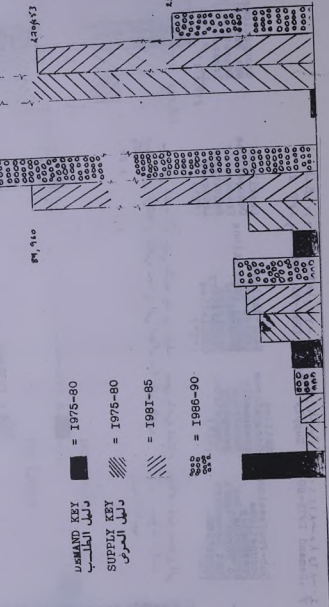
المهن التي لا تحتاج إلى التعليم أو التدريب

المهن غير المهيكلة التي تتطلب معرفة القراءة والكتابة

المهن شبه المهيكلة التي تتطلب التعليم التحضيرية

المهن المهنية التي تتطلب درجة واحدة إلى ثلاث سنوات

10,000
 50,000
 100,000
 200,000
 400,000
 600,000
 800,000
 1,000,000
 1,200,000
 1,400,000
 1,600,000
 1,800,000
 2,000,000



DEMAND KEY
 دلائل الطلب
 SUPPLY KEY
 دلائل العرض

■ = 1975-80
 ▨ = 1975-80
 ▨ = 1981-85
 ▨ = 1986-90

موظفو الدولة حسب السنوات والجنس وفئات الأعمار
 Government employees by ministries, sex and group of age

القطاعات Ministries	المجموع Total		الذكور 65+		16-64		15-44		20-24		20-24		أقل من 20 Less than 20		العمالة Employment
	مجموع Total	إناث F	ذكور M	إناث F	ذكور M	إناث F	ذكور M	إناث F	ذكور M	إناث F	ذكور M	إناث F	ذكور M		
President & Prime Min.	397	-	397	1	62	305	-	13	-	-	-	-	-	16	الرئيس والوزير الأول
Dept. of Antiquities	30	-	30	-	5	20	3	-	-	-	-	-	-	3	الهيئة العامة للآثار
Civil Service Comm.	35	3	30	1	9	56	13	3	13	2	13	13	13	13	الهيئة العامة للتدريب
National Institute	61	11	50	-	3	24	6	14	3	2	14	3	2	13	المعهد القومي للإدارة
Office of Legal Adv.	24	3	24	-	2	16	-	-	-	-	-	-	-	3	مكتب المستشار القانوني
C.O. Control & Audt.	67	3	64	-	2	36	-	-	-	-	-	-	-	3	الهيئة القومية للإدارة
Plan. & Adm. Organ.	26	1	25	-	2	16	-	-	-	-	-	-	-	3	وزارة التخطيط
Min. of Interior	11512	-	11512	-	-	1512	-	-	-	-	-	-	-	12	وزارة الداخلية
Legislative Council	103	-	103	-	4	51	-	-	-	-	-	-	-	7	مجلس النواب
Min. of Justice	986	-	986	-	532	358	-	-	-	-	-	-	-	15	وزارة العدل
Min. of Education	4351	287	4064	125	22	1199	106	2163	72	464	87	113	15	15	وزارة التعليم
Sana'a University	72	3	69	-	1	4	1	30	1	27	-	-	-	8	جامعة صنعاء
Educ. Dev. Project	15	1	14	-	-	-	-	-	-	-	-	-	-	1	مشروع تطوير التعليم
Min. of Health	2199	416	1783	-	-	-	-	-	-	-	-	-	-	1	وزارة الصحة
Min. of Agriculture	400	8	412	5	2	59	4	330	1	14	1	4	4	4	وزارة الزراعة
Nat. Office for Food	9	1	8	-	1	6	-	-	-	-	-	-	-	1	المكتب القومي للغذاء
Min. of Public Works	332	8	324	-	1	74	2	235	1	11	2	2	2	2	وزارة الأشغال
Coverage & Meter Dept.	88	3	85	-	8	2	56	-	-	-	-	-	-	1	مؤسسة المياه والمهربي
Highway Authority	915	3	912	-	64	758	-	-	-	-	-	-	-	11	مصلحة الطرق
Min. of Municipality	2102	609	1893	-	10	25	309	183	1193	44	238	17	83	83	وزارة البلديات
Min. of Communication	1070	21	1049	-	22	213	3	367	8	169	10	78	78	78	وزارة الاتصالات
Civil Aviation Dept.	186	4	182	-	2	98	1	65	1	65	1	17	17	17	مصلحة الطيران المدني
Yemen Airways	257	4	253	-	19	3	183	1	33	-	-	-	-	8	مصلحة الطيران المدني
Min. of Local Admin.	978	2	976	71	1	309	527	35	18	35	18	18	18	18	وزارة الأمانة العامة
Min. of Information	362	6	356	2	33	259	2	52	4	10	4	10	10	10	وزارة الإعلام
Dept. of Tourism	30	1	29	-	-	-	-	-	-	-	-	-	-	1	مصلحة السياحة
Min. of Foreign Aff.	107	1	106	1	27	127	6	12	2	9	2	9	9	9	وزارة الخارجية
Min. of Economy	131	2	129	-	18	81	-	19	2	11	2	11	11	11	وزارة الاقتصاد
Dept. of Min. & Petrol	22	1	21	-	10	7	-	9	1	7	1	7	7	7	مصلحة البترول
Min. of Finance	2041	11	2030	100	-	523	2	1111	-	-	-	-	-	9	وزارة المالية
Dept. of Taxation	286	-	286	-	40	153	-	206	9	90	9	90	90	90	مصلحة الضرائب
Dept. of Customs	668	2	666	3	1	192	468	30	13	45	13	45	45	45	مصلحة الجمارك
Dept. of Railies	159	-	159	4	73	73	-	4	-	-	-	-	-	5	مصلحة السكك الحديدية
Central Planning Org.	140	12	128	-	3	64	3	31	7	4	5	4	4	4	الهيئة القومية للتخطيط
Min. of Supply	219	2	217	-	17	153	-	28	1	19	1	19	19	19	وزارة التموين
Min. of Social Affairs	129	1	128	-	6	73	-	29	-	28	-	28	28	28	وزارة الشؤون الاجتماعية
Min. of Manf	258	-	258	14	-	93	188	13	13	13	13	13	13	13	وزارة الصناعة
Central Bank of Yemen	388	60	328	-	4	218	16	41	16	41	16	41	41	41	البنك المركزي اليمني
Grand Total	31315	1154	30159	413	56	3907	734	2870	162	1887	204	682	682	682	المجموع

* Total member

مصدر البيانات *

قائمة موظفي الخدمة حسب الوزارات ولاخصاص
 Government employees by ministries and specializations

Ministry	Total	Civil Servants	Technicians	Professionals	Others	Male		Female		Total
						Male	Female	Male	Female	
President & Prppr. Sec.	397	25	195	51	37	10	-	-	6	50
Dept. of Antiquities	30	-	1	7	1	-	-	-	1	54
Civil Service Comm.	61	12	26	36	1	-	-	-	2	15
Min. of Justice	95	13	5	8	4	1	-	-	4	4
Office of Legal Adv.	64	3	3	27	1	-	-	-	4	4
S.O. Control & Audit	37	3	17	1	-	-	-	-	1	14
S. & Adm. Organ.	286	8	1	1	-	-	-	-	9	64
Legislative Council	11512	11512	30	6	-	-	-	-	36	379
Min. of Education	103	3	3	387	2	-	-	-	4	24
Min. of Health	996	337	212	3	307	3	-	-	7	124
Min. of Interior	4351	16	814	20	318	9	307	3	1	5
Min. of Agriculture	72	20	12	4	10	1	-	-	1	1
Min. of Planning	15	1	2	3	3	-	-	-	1	134
Min. of Health	2399	632	802	460	146	29	-	-	12	28
Min. of Agriculture	420	29	75	51	145	20	-	-	13	20
Int. Office for Road	9	-	3	1	-	-	-	-	6	4
Min. of Public Works	332	17	64	84	58	26	-	-	13	19
Coverage & Water Dept.	88	1	22	8	13	25	-	-	6	217
Highway Authority	2302	14	35	79	404	7	-	-	15	15
Min. of Municipality	1070	14	252	89	143	12	-	-	6	44
Min. of Dominion	186	10	25	16	69	30	-	-	5	5
Civil Aviation Dept.	257	20	145	68	13	71	-	-	13	2
Team Airways	978	113	232	22	337	7	-	-	8	18
Min. of Local Adm.	362	53	36	9	133	30	-	-	17	12
Min. of Information	30	-	5	13	2	-	-	-	1	1
Dept. of Tourism	197	10	18	1	49	-	-	-	19	12
Min. of Foreign Affs.	131	10	13	1	49	-	-	-	29	24
Min. of Economy	22	-	4	2	4	-	-	-	1	54
Min. of Min. & Petrol	2043	243	368	10	114	-	-	-	29	93
Min. of Finance	286	3	25	120	-	-	-	-	46	17
Dept. of Customs	668	609	118	13	239	-	-	-	4	36
Min. of Defense	159	1	23	1	73	2	-	-	23	31
Min. of Supply	140	-	21	3	77	-	-	-	2	27
Min. of Social Affs.	239	79	21	7	70	-	-	-	31	38
Min. of High.	258	25	3	149	-	-	-	-	17	41
Central Bank of Egypt	588	81	6	268	-	-	-	-	30	210
Grand Total	33335	15149	4134	1011	6011	411	3046	305	1325	3669

اسم ١١٤١ اسم بالغة
 اسم ١١٤١ اسم بالغة

قائمة موظفي الخدمة حسب الوزارات والخصائص
 Government employees by ministries, governments and sex

Ministry	Total	Civil Servants	Technicians	Professionals	Others	Male		Female		Total
						Male	Female	Male	Female	
Ministry of Education	397	25	195	51	37	10	-	-	6	50
Ministry of Health	996	337	212	3	307	3	-	-	7	124
Ministry of Interior	4351	16	814	20	318	9	307	3	1	5
Ministry of Agriculture	420	29	75	51	145	20	-	-	13	20
Ministry of Public Works	332	17	64	84	58	26	-	-	6	217
Ministry of Municipality	1070	14	252	89	143	12	-	-	6	44
Ministry of Civil Aviation	257	20	145	68	13	71	-	-	13	2
Ministry of Local Administration	362	53	36	9	133	30	-	-	17	12
Ministry of Information	30	-	5	13	2	-	-	-	1	1
Ministry of Foreign Affairs	197	10	18	1	49	-	-	-	19	12
Ministry of Economy	22	-	4	2	4	-	-	-	1	1
Ministry of Mining & Petroleum	2043	243	368	10	114	-	-	-	29	24
Ministry of Finance	286	3	25	120	-	-	-	-	46	17
Ministry of Customs	668	609	118	13	239	-	-	-	4	36
Ministry of Defense	159	1	23	1	73	2	-	-	23	31
Ministry of Supply	140	-	21	3	77	-	-	-	2	27
Ministry of Social Affairs	239	79	21	7	70	-	-	-	31	38
Ministry of Highways	258	25	3	149	-	-	-	-	17	41
Central Bank of Egypt	588	81	6	268	-	-	-	-	30	210
Grand Total	33335	15149	4134	1011	6011	411	3046	305	1325	3669

Total number

الجدول (٧) تابع

Table(7) cont*														
14	13	12	11	10	9	8	7	6	5	4	3	2	1	
20	6	14					13	2		4	1	179	B-3	
20	6	14					13	2		4	1	Total	المجموع	
1765	193	1572	70	2	424	59	793	60	245	72	40	133	C I S	
26	-	26	1	-	5	-	18	-	2	1	15	310		
955	1	954	57		252		959		71	31	29	26		
141	38	103	1		1		44	8				321		
* 1	-	1					163		38		13	331		
251	-	251	3		34		146		17			391		
240	-	240	9		68		2018	26	452	56	165	393		
3642	89	3553	90	2	828	5	1					442		
1	-	1										Total		المجموع
7022	321	6701	231	4	1612	65	3743	94	856	158	259			
4	-	4			2		2		10		1	180		C I S
19	-	19					8		12		1	581		
21	-	21					8					582		
6	-	6			1		5					583		
11952	-	11952	8		120	-	11795		19		10	700		
54	-	54	1		6		44		3			713		
7	-	7					8		7			834		
15	-	15					8					841		
1	-	1					1		13		3	843		
143	-	143			15		112		1			853		
33	-	33	1		5		26					854		
10	-	10					7		2		1	856		
45	-	45				5	37		2		1	857		
12	5	7				4	7			1		929		
12322	5	12317	10		154	4	12067	69	1	17	20	134	Total	
1228	27	1201	21	3	380	8	639	6	141	10	20	139	C I S	
96	1	95	3		14		710	7	1			139		
1324	28	1296	24	3	394	8	710	6	148	11	20	Total		المجموع
87	-	87			21	-	65				1	531	C I S	
4	-	4					1		2			532		
1	-	1					1				1	600		
1	-	1										724		
5	-	5					5					791		
8	-	8					8					831		
11	-	11			2		8		1			871		
43	-	43			10		32					872		
22	-	22					17		5			927		
46	-	46	2		7		36		1			954		
1	-	1					1					969		
229	-	229	2		40		174		10		3	Total		المجموع

الجدول (٧) تابع

Table(7) cont*															
14	13	12	11	10	9	8	7	6	5	4	3	2	1		
2	-	2										2	195		
395	-	395			9		96					189	370		
279	19	260			9		54	2	139		8	43	380		
186	5	181			4		64	5	108		4		551		
4	-	4							4				571		
228	-	228			10		55		121		33		599		
56	-	56							44		1		611		
176	1	175			2		20		152	1	1		621		
10	-	10					1		9				623		
2	-	2							2				628		
10	-	10											756		
1	-	1					1		8		1		776		
1	-	1							1				820		
1	-	1							1				902		
5	-	5			1		2		2				910		
1	-	1							1				924		
7	-	7							7				939		
1	-	1							700				943		
8	-	8							713				951		
12	-	12			1				834				959		
20	-	20					3		8				973		
2	-	2					1		16				974		
2	-	2					1		1				980		
4	-	4					1		4				981		
2	-	2					1		1				983		
762	-	762					62		602		64		985		
2176	25	2151	36				378	7	1432	9	219	9	86	Total	المجموع
4494	596	3898	35	49	553	478	2552	48	477	21	281	552	C I S		
3	-	3					3					560			
3	-	3					1		2			631			
4500	596	3904	35	49	554	478	2557	48	477	21	281	Total	المجموع		
238	1	237					9	1	226				A-1		
2357	8	2349			71		744	5	1449	3	74		11	A-2	
102	-	102					3		87				2	B-1	
1025	166	859			4		19	166	812		23		1	B-2	
20	6	14							13	2			4	B-3	
7022	321	6701	231				4	1612	65	3743	94	856	158	259	C-1
12322	5	12317	10					154	4	12067	69	1	17	C-2	
1324	28	1296	24				3	394	8	710	6	148	11	20	D-1
229	-	229	2					40		174				3	D-2
2176	25	2151	36					378	7	1432	9	219	9	86	E
4500	596	3904	35	49	554	478	2557	48	477	21	281	Total	F		
31315	1156	30159	413	56	3907	754	23270	162	1887	204	682	Total	المجموع		

العاملون حسب النشاط الاقتصادي وحجم المنشآت

Table (1) Employment by Economic Activity and Rise of Establishments.

Activities	المجموع Total	الجدول (1)		النشاط
		أقل من 5 عمال Less than five workers	5 عمال فأكثر Five workers and more	
Agriculture	200	192	8	الزراعة
Mining & Quarrying	50	50	-	المناجم والحاجر
Manufacturing	3633	3102	531	التجديف
Electricity & Water	870	865	5	الكهرباء والمياه
Construction	2191	2191	-	البناء
Trade & Restaurants	6220	3839	2381	التجارة والمطاعم
Transport & Communication	633	611	22	النقل والمواصلات
Banking Insurance	1176	1166	10	المصارف والتأمين
Community & Personal Services	2324	1982	342	الخدمات الجماعية والشخصية
Total	17297	13998	3299	المجموع

Source: Manpower Survey 1975.

المصدر: بحث القوة العاملة 1975

العاملون حسب فئات العمر والجنس

Employment by age-group and sex

Table (12)

Age Group	المجموع Total	الجدول (12)		فئات العمر
		اناث F.	ذكور M.	
Less than 20	3242	303	2939	أقل من 20 سنة
20 - 24	3504	75	3429	20 - 24
25 - 44	8677	113	8564	25 - 44
45 - 64	1705	39	1666	45 - 64
65 and more	169	4	165	65 فأكثر
Total	17297	534	16763	المجموع

Source: Manpower Survey 1975.

المصدر: بحث القوة العاملة 1975

العاملون حسب المستوى التعليمي

Employment by Education Level

Table (13)

Education Level	المجموع Total	الجدول (13)		المستوى التعليمي
		اناث F.	ذكور M.	
Illiterate	6883	377	6506	أبسن
Informal	5530	11	5519	غير نظامي
Less than 4 years	597	45	552	أقل من 4 سنوات
4 - 5 years	663	16	647	4 - 5 سنوات
6 - 8 years	1370	28	1342	6 - 8 سنوات
9 - 11 years	1095	24	1071	9 - 11 سنوات
Secondary	805	22	783	ثانوية
Post Secondary	154	6	148	بعد الثانوية
University	200	5	195	جامعة
Total	17297	534	16763	المجموع

Source: Manpower Survey 1975.

المصدر: بحث القوة العاملة 1975

العاملون حسب الحالة العائلية

Employment by Status

Table (14)

Employment Status	المجموع Total	الجدول (14)		الحالة العائلية
		اناث F.	ذكور M.	
Own Account	2370	7	2363	يعمل لنفسه
Recipient of Wage	13987	512	13475	يعمل بأجر
Unpaid Family	940	15	925	يعمل لذاته بدون أجر
Total	17297	534	16763	المجموع

Source: Manpower Survey 1975.

المصدر: بحث القوة العاملة 1975

المخولفون في النطاق العام بحسب النسيبة والانشاآت و نشاآت عمال باله
Employee in the Private Sector by Occupation and Activity
Establishment of 5 workers and over.

الجدول (17) م

البيضة	المجموع	الزراعه	التاجير	التصايف	الكهرباء والبساطه	النسا	التجاره	النقل	الحال	الخدمات
White	Total	Agri-culture	Trade & Gentry	Handicraft & Mater	Electricity & Water	Construction	Transport & Tourism	Communication	Insurance	Service
17	3	2								
30	3	3								
1										
6										
2										
14										
2										
3										
1										
1										
16										
2										
1										
1										
1										
11										
9										
1										
3										
5										
88										
18										
1										
1										
1										
35										
26										
6										

الجدول (17) م

1	2	3	4	5	6	7	8	9	10	11	12
18						221					
18									10		
179	810	227	1808	131	226	293			16		
15	33	81	50	13	17	21			1		
4	19		20	2	10	1			1		
70	731	135	21	2	4	1			3		
	2		52	88	193	196			1		
	5		43						5		
1	4		143	4		4			1		
			108	13		2			1		
2			1						1		
			1						7		
11			11						12		
2			123			6			11		
1			10			7			131		
									22		
269			20	111	60	162	148		12		
15				8			10		15		
13									31		
84			1	15	36		4		25		
							8				
11				28			8				
							5		19		
1				6			1		7		
				3			1		3		
138			4	66	50		2		20		
				7			76		4		
6				17			14		2		
				9			14		2		
				9			4		47		
1									3		
									56		
218			4	166	190	147	539		10		
6				37					43		
4				59					3		
									21		
									11		
									8		
									33		
									8		
									33		
									8		
									7		
									7		
									3		
					50				11		
22				8							
									63		
80				15			6		30		
74	1	-2		37			9		96		
				7			5		31		
									40		
15	1								222		
				3	148	5			120		
									193		

العاملين في القطاع الخاص حسب المهنة والجنسية والنشاط الاقتصادي

Employees in the Private Sector by Occupation and Activity

Table(20)

التصنيفات Other	السوري Soudani	مراكشي Iraqi	اردني Jordanian	مصري Egyptian	جميع فئاتهم Total of non-Yemeni	يمني Yemeni	المجموع Grand Total		المهنة Occupation
							1990	2000	
18	9	8	7	6	5	4	3	2	1
130	1	1	9	20	161	17136	17297	G. T.	T.
24		1	1	11	37	38	95	1300	37
1				1	1	1	2	011	
1					1	1	2	021	
1				1	2	3	4	032	
3					3	14	17	033	
2					2	3	5	039	
13			1	8	22	15	37	051	
1		1			1	1	2	054	
					1	6	7	061	
						2	2	063	
						1	1	065	
1				1	2	3	5	081	
1					1	1	2	090	
					1	1	1	132	
21			2	2	25	175	200	T.	
6				1	6	19	25	110	
					1	2	2	139	
					1	3	4	131	
1			1		1	2	3	194	
					1	1	1	195	
					1	6	6	199	
					5	5	5	201	
					11	11	11	202	
11			1	1	13	112	125	211	
3					3	12	15	212	
						3	3	219	
6				1	7	19	26	T.	
3					3	12	15	031	
2				1	1	2	3	032	
1					2	1	3	042	
					1	4	5	141	
21	1				22	306	348	T.	
2	1				1	5	5	014	
1					4	5	5	033	
13					2	65	67	034	
					20	21	21	039	
					1	76	89	039	
					22	22	22	054	
					1	1	1	062	

الخدمات الاجتماعية والصحية

الجدول (19) تابع

Community & Personal services Table(19) cont.

23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
2	37		7	5	13	5	39	5	87	3	134		73		75	2	572	22	1243	44	2260	T.	
28		5				2	2	1	1		1					1				3		38	A-1
1	5	1			2	1	3	1	1							2				14		14	A-2
1					4		8									4				9		9	B-1
				5												44				7		7	B-2
							1	1	2							1				2		2	B-3
						2	4	2	20	2						9				6		6	C-1
					2			2	20							1				22		8	C-2
			1				11									27				66		-	D-1
		3					1		8							17				78		78	D-2
								1	13							18				275		12	E
								10								8				796		12	F

الجدول (20) تابع

Table (20) cont'd

10	9	8	7	6	5	4	3	2	1
1					1		1	063	
						3	3	068	
						1	1	169	
2					2	34	36	071	
						32	32	072	
1					1	1	2	073	
						2	2	076	
						1	1	077	
1					1	41	42	396	
						5	5	360	
						13	13	661	
1					1	357	358	T.	
1					1	357	358	500	B - 3
37			6	4	47	4954	5001	T.	
6					6	244	250	300	
						50	50	310	
4					4	51	55	321	
22			6	4	32	1956	1988	331	
						5	5	341	
1					1	66	67	400	
2					2	1415	1417	410	
1					1	277	278	421	
						3	3	422	
						8	8	431	
						1	1	432	
						13	13	441	
						2	2	442	
						11	11	443	
1					1	742	743	451	
						110	110	490	
6				2	8	931	939	T.	
						22	22	163	
						19	19	180	
						31	31	581	
						1	1	583	
1					1	179	180	700	
						11	11	713	
						73	73	834	
						22	22	941	
						19	19	842	
2				2	4	204	208	843	
						2	2	844	
						91	91	853	
					2	45	47	854	
						9	9	856	
						62	62	857	
1					1	61	62	989	
					-	-	-		D - 1

الجدول (20) تابع

Table (20) cont'd

10	9	8	7	6	5	4	3	2	1
4					4	1513	1517	T.	
						43	43	531	
						83	83	532	
						8	8	600	
						21	21	723	
						11	11	732	
						2	2	749	
						35	35	753	
						16	16	771	
						8	8	772	
						3	3	769	
						7	7	811	
						3	3	812	
						82	82	831	
						31	31	862	
1					1	106	107	871	
						271	271	872	
1					1	50	50	873	
						39	46	901	
2					2	31	31	927	
						462	464	954	
						123	123	969	
7					7	5558	5595	T.	
2					2	387	387	900	
						309	311	195	
						9	9	370	
						23	23	380	
						5	5	540	
						662	662	551	
1					1	107	108	571	
						5	5	572	
						114	114	599	
						7	7	611	
						10	10	621	
						23	23	623	
						8	8	628	
						30	30	711	
						276	276	734	
						189	189	751	
4					4	90	94	752	
						17	17	754	
						38	38	756	
						12	12	761	
						46	46	773	
						3	3	774	
						281	281	776	
						1752	1752	779	
						19	19	781	
						7	7	803	
						1	1	820	
						2	2	835	
						76	76	880	

Table (20) cont'd

الجدول (٢٠) طبع

10	9	8	7	6	5	4	3	2	1
						42	42	892	
						3	3	901	
						39	39	902	
						46	46	910	
						19	19	924	
						22	22	931	
						47	47	939	
						19	19	942	
						249	249	943	
						34	34	949	
						1	1	951	
						27	27	952	
						1	1	955	
						37	37	959	
						11	11	974	
						16	16	980	
						497	497	985	
3					3	3245	3248	T.	
1					1	2040	2041	552	
1					1	71	72	560	
						1	1	631	
1					1	1133	1134	971	

Date	Description	Amount	Balance
1912	Jan 1	100.00	100.00
1912	Feb 1	50.00	50.00
1912	Mar 1	25.00	25.00
1912	Apr 1	15.00	10.00
1912	May 1	10.00	0.00
1912	Jun 1	5.00	5.00
1912	Jul 1	5.00	0.00



b 15692875



Gift

الجمهورية العربية اليمنية
رئاسة مجلس الوزراء
الجهاز المركزي للتخطيط
ادارة الاحصاء

بحث القوة العاملة

لعام ١٩٧٥

منهج وتحليل وتقييم ونتائج