UNITED ARAB REPUBLIC

THE INSTITUTE OF NATIONAL PLANNING

التخطيط القومي

C O N T E N T S

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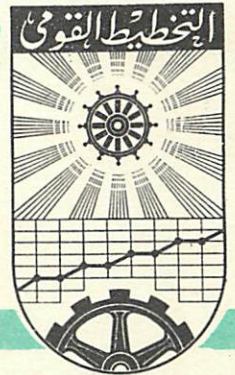
Some Aspects Of The Employment Problem In The Arab Republic of Egypt

1. The Problem Stated

The problem of increasing labour absorptive capacity is not merely how to absorb the redundant labour but rather how to make the best use of the available resources, including labour. However, the whole process of employment creation may be considered as containing a great number of different variables which can be distinguished from each other for analytical purposes - but which are, at least most of them, closely inter-related.

Not all the variables which may affect the degree of labour absorption and its effectiveness are, or can be, controlled to the same extent, at least for a certain future range of time. Further more, there is no traditionally established and clear cut notion of the diagnosis of employment problems in underdeveloped countries. So many factors proliferate; that at the very beginning one may find it extremely difficult to decide how to enter the problem, so to speak.

Therefore, we cannot accept the fully reasoning given by each of the Conventional theories of unemployment / viz., The Classical theory of wages and employment, Natural wave theories and the Demand defficiency theory. All economic theories are valid - provided that they are internally con-

sistent, but an economic theory can be useful as a guide
to policy making only if it is relevant to a particular
society. And for it to be relevant it must take into
account the structure of the economy, the behaviour of
individuals and governments, and the institutions in force.[1]
Many of the theories setting out the relationship between
economic variables apply only to developed industrial eco-
nomies and can be misleading or even dangerous when applied
to different types of economy. This is what makes it so
important for economists from the underdeveloped countries
to modify existing models or to develop new ones.

Many Western Capitalist economists make use of the
theoretical explanation of the demand deficiency doctrine.
They concentrate on the assumption that unemployment is caused
by the insufficiency of demand to utilise the available real
resources and capacities. The supply approach has been
criticized and opposed by some economists, such as Fleming,
Hirchman and Singer.

However, as far as effective demand doctrine is con-
cerned, idle capacities are a result of deficiency of demand /
the basic keynesian depression case/. The case differs in

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1) Demas W.G. No. 2.

underdeveloped countries. Idle capacity is due to the bot-
tlenecks of the supply of fixed assets and working Capital
and not mainly as result of the deficiency of demand. This
is the first reason to reject the hypothesis of deficiency
of effective demand theory. Therefore, for the smooth work
of multiplier there should not be only involuntary unemploy-
ment and excess Capacity but there must be an elastic supply
of fixed assets and working Capital. That is why underemploy-
ment in underdeveloped countries cannot be understood simply
in terms of dificiency of demand. The second reason for rejecting
the hypothesis of deficiency of the effective demand is to be
found in the saving side. Personal savings are low ... which
indicate a high marginal propensity to consume. As Mauder
said, "the boot is probably on the other foot". There may be
a need to restrict consumption.[2] Thirdly: the problem of
underdeveloped countries is on the supply side i.e...., the
productive capacity is a key factor for expansion in the
sense that any increment of investment based on deficit finan-
cing may lead the economy to inflationary pressure than in-
creasing output and employment. As Kalecki has rightly
remarked, if the reserve capacities are non-existent or

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2) Mauder, W.F No. 5.

insufficient the attempt to secure full-employment in the short run may easily lead to inflationary tendencies in large sections of the economy because the structure of equipment does not necessarily match the structure of demand.[3]

Fourthly: the existence of disguised unemployment, household enterprise, production for self consumption, dominance of agriculture, deficiency of capital equipment and of technical knowledge - all characteristic of underdeveloped countries - creat conditions analogous to those of the full employment visualized by Keynes, when in actual fact there is no full employment in the economic or even the popularly accepted sense of the term. Fifthly: this theory is concerned with aggagate demand in the sense that any shift of demand which does not affect the level of aggragate demand has no negative impact on the level of employment. This way of thinking does not coincide with the situtation prevailing in underdeveloped countries where the degree of mobility of factors of production is extremely low. Sixthly: the expansion of consumer goods industries is not apt to be the effective engine for the proper multiplier in those countries even with a high marginal propensity to consume.[4]

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3) Kalecki, M. No. 7.
4) See: Rao, V.K No. 10 see Demas, W.G. No. 2.

The volume of employment, in many of the under-
developed countries, grows only to the extent to which the
supply of tools, equipment and working capital on the one
hand, and of wage goods on which the income of the newly
employed is spent, on the other hand are expanded. It may
be held that there limitation on employment are likely to
be jointly operating, not alternative factors, this is
probably true. Yet, at the same time, one of them is
likely in any given situation to be the most effective
bottleneck. It may be that their relative importance as
limiting factors changes at different stages of develop-
ment.[5]

With this last in mind we consider now the main
features that come closer to the heart of employment
problems:

(1) over population, disguised unemployment and lack of
    employment opportunities outside the agricultural
    sector.

(2) Low level and rate of increase of productivity, low
    income, zero saving for the majority of the people
    and very little capital per head or capitalization
    per worker.

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5) See: Dobb, S.M No. 3.

(3) Shortage of social over head capital, or infrastructure.

(4) Inadequate investment in human capital.

(5) Limited experience of the public sector and the technique of planning.

(6) Imperialistic exploitation.

2. General Problems Related to Employment Creation:

The predominant feature of the Egyptian economy is supply determined. The productive capacity of the economy is the Key factor for further development and the elasticity of supply is vital to its effectiveness. Such being the case, Egypt is in sore need for complementarity effect of investment in order to stimulate new energies and new capacities for new productive employment creation.

Furthermore, the process of economic development must be a mean for bringing about full employment. This does not mean that we are striving at full-employment for its own sake but full-employment is an instrument which enables the country concerned to realize the economic growth, social justice and at the same time to achieve an equilibrium of the balance of payment and to avoid the danger of great

6) Higgins, B. No. 6.

inflationary strains.

2.1. The Demographic Factor

Egypt is one of the most populous countries in the world. Population growth and population preasure represent a serious socio-economic problem which is further aggravated by remarkable lack in natural resources.

The population was 9.7 million in 1897 and reached about 37 million in 1975 i.e. an increase of about 27.3 million, representing an increase about 282% within that period. One cannot find a similar increase in population in other countries including India. The population explosion has become a social phenomenon revealed by Egypt's statistics which illustrates a matchless population growth.

The population pressure inflicts a double loss: first, through simple diminishing returns and second, by diverting resources from more to less productive use.[6]

As a matter of fact there is close relationship between the rate of growth of population as well as its age structure and the manpower supply. Furthermore, a large labour force requires a large stock of productive facilities in order to

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6) Higgins, B. NO; 6.

have the same productivity per head. The percent of national income that must be invested merely to keep productivity from declining is some three times the annual percent rate of increase of the labour force. In other words, if the labour force were growing by three per cent a year, a level of net investment of nine per cent of national income would be required to prevent declining productivity, while if the rate of growth of the labour force was one per cent a year, the needed level of investment for this purposes would be only three per cent of the national income. This rule of thumb assumes that the stock of capital must increase as much as the labour force to prevent a decline of productivity and assume further that the stock of capital is roughly three times as large as the current level of national income.[7] Yet the faster growing labour force has no adventages in achieving a high level of savings to finance the needed higher level of investment.

2.2. Saving and the Investment Fund:

The rate of growth of national income in relation to population, investment and capital coefficient can be figured out by the following formula:

$$r = (i/m) - P$$

7) Coal, A. T No. 1, Sangha, K. No. 11.

where

      r - represents the rate of growth of income per

         capita.

      i - represents saving ratio

      m - represents capital output ratio

      p - represents the rate of growth of population.

The human variable [ ] cannot be controlled in the short run and at the same time, technical variable is related to physical type of investment / it is given via the technical coefficient in the plan/. Such being the case the _facile princeps_ factor for the rate of growth of per capita income and employment creation is the national rate of saving.

During the first five year plan / 1960-1965/, the rate of growth of population was 2.8%. In the mean while, the annual rate of growth of the national income averaged about 9.0% in current prices and 6.5% in constant prices. This rate dropped during the period 1965/66 - 1966/67 to 5.4% in current prices. Since 1960, there was a continuous increase in the rate of population growth. It is, however, clear that the high rate of population growth has absorbed a great part of the national income and consequently curtailed the potentialities for

reinvestment and for creating new capacities and employment openings. The national income and its rate of growth were decreased during the period 1967/68 - 1968/69 as a result of the imperialistic aggression which affected directly mining, industry, transport, communication and storage sectors, and also as a result of some deficiencies in the implementation of the national plan.

If we compare the rate of growth of national income with the rate of growth of the per capita income it will be seen that the latter is less than the former as a result of the continuous growth of population. The absorption of the national income by excessively increase of population has restricted the welfare of the society.

It is clear from the table no. 2 in the appendix that, while the rate of national investment during the first five year plan was 17.6% and 16.3% in /1960-65/ and /1965-69/ respectively, domestic savings did not exceed 12.7% and 10.5% in the same order.

Besides, one of the main problems which spring from the policy of employment maximization in Egypt is the dificulty of stabilizing the price level and avoiding the inflationary pressure. The cost of living general index reached 128.9 in

1966/67 compared with 100.3 in 1960/61. If we consider
food only, its index number was 98.4 and 152.7 in 1960/61
and 1966/67 respectively. That is why employment openings
hing largely also on the development of wage goods. However,
there are wide spread ideas among the economist that full
employment could be followed only at the cost of continued
inflation.

2.3. The shortage of capital goods:

Manufacturing sector could be devided into three
categories, namely: 1/ Consumer good industry, 2/ Intermediate
good industry 3/ Capital good industry. The share of capital
good industry to the total output of the Egyptian industry is
rather puny / viz., 2 per cent in 1950 and 7 per cent in 1970
and consequently the greater part of the intermediate goods
was allocated to the requirement of consumer good industry.
The moderate increase of the capital good industry is not
sufficient for the development purposes. The available size
of capital stock would be affected, of course, by the stage
of development, specialization and by acceleration of market
oriented production, all those factors being interconnected.
That is why we should give special stress and concentration
on the creation of durable capital assets, that is which /
beside the imported capital goods/ by their nature represent the
planned investment.

It is unfortunate, indeed, that many luxurious goods are
manufactured in Egypt at present e.g., electric washing
machines, television sets, transistor sets, private cars,
refrigerators, etc., whereas, power and automatic looms needed

for the most important and thriving industry in Egypt, viz., cotton textiles are, to a great extent, still imported.[8]

Besides, the employment problem in Egypt will, however, require more constant appraisal and continuous adaptation of the policy to match with the changes of the international economic structure.

On the other hand the shortage of capital goods is appeared in most cases, in the spread of small scale industries in the form of handicrafts and small workshops, depending completely on the available local raw materials. "The Industrial Production Census - Nine Persons or Less", issued by the Central Agency for Public Mobilization and Statistics, gives a clear picture of such industries and its role in the Egyptian Economy.

As regards the relative importance of such industries in terms of some employment and production criteria, it may be worthly to mention that it employed about 4% of the total labour force and 33% of the industrial labour force; it accounted for 11% of the value added contributed by the whole industrial sector, and some 3% of the total value added contributed by all economic sectors.[8]

Tables Nos (6,7,8) in the statistical appendix give some detailed data about industries under discussion, it shows that it employed more than 285,000 persons with an average of 2 employees / establishment.

Concerning production, the total value of gross output of those establishments amounted to Ł. 142.2 m., out of

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8) Central Bank of Egypt; No. 13.

which ₤. 48.6 m. or 34% were contributed by industries and ₤. 24.4 m., or 17% by footwear group. The corresponding figures of value added as well as its distribution among factors of production are also given in the above mentioned tables.

2.4. Capacity Utilization:

Mistakes in planning and / or the execution of the planned programmes would lead to imbalances in economic structure and disproportionality in the economic development. Consquently, some industrial enterprises cannot reach their full capacity and valuable equipment may often remain idle. In 1965-66 there were about 937 industrial enterprises operating with less than full capacity. It is a very dangrous indicator with respect to the total number of industrial enterprises. This, however, cannot represent the real weight as it does not include the size of the enterprises and the rate of idle capacity.

The problem of demand and marketing represents only 12% of all reasons of idle capacity while the supply problems represents 88% of these reasons.

During the period defined as "the early stage of industrialization" the proportion of the total increase in employment attributable to better capacity utilization was approximately 59% in Hungary / 1950-54/, 48% in Poland / 1951 - 59/ and 33% in the USSR / 1928-32 /. [10]

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10) Kabaj, M. no. 7.

That is why, by utilizing existing productive facilities more fully, a considerable number of employment opportunities can be obtained. On the other hand, planning of labour mobility, either horizontal or vertical, is vital as a necessary condition for achieving the employment objectives.

3. Sectoral Expansion of Employment and Its Effectiveness:

3.1. Structural Change of Employment:

Between 1937 and 1960, Egypt had a clearly defined employment structure, the great part of the working population being engaged in agriculture and in related rural activities. Throughout the nation as a whole in 1937, 69.5% of all workers were engaged in the agricultural sector as against 61.8% in 1947 and 56.3% in 1960. This shows a gradual decline in the relative importance of labour absorption in the agricultural sector, a decline that was offset mainly to a greater extent by a growth in services activities which employed 24.0% in 1937, 29.2% in 1947 and reached 33.9% in 1960 of the active population. Tables Nos (9 to 12) give some details of such structural changes within the industrial sector in the years 1961, 1962.

3.2. Rate of unemployment:

The total number of labour force increased from 6,711,000 in 1959/60 to 8,762,000 in 1968/69, while the corresponding numbers of employment were 6,006,000 and 8,051,200 respectively. This means that the total number of the labour force increased by 2,051,000 persons while the total employment increased by 2,045,000 persons.

The two figures show that the created employment
opportunities during the given period were not even
enough to absorb the natural increase of labour force.
The employment ratio increased from 89.5% in 1959/60
to 91.1% in 1968/69. The corresponding unemployment
ratios were 10.5% and 8.1%.

However, the scope of idle labour may be more
serious if we take into consideration the problem of
disguised unemployment, specially in agricultural sector.
However, we have found/ by some empirical studies/ that
the shift of a part of the agricultural labourers towards
non-agricultural activities, especially industry, can no
longer be assumed under the given institutional framework
of this sector which sets strict limits to the required
labour mobility. This conclusion contradicts with the
definition of disguised unemployment in its strict sense
which assumes that the disgused form of unemployment exists
when the marginal productivity is zero over a wide range.
That is why there is what may be called unwithdrawable
disguised unemployment with a given technique and organiza-
tional levels. Besides, there is open unemployment among
a fraction of the rural population and a severe seasonal
unemployment in the agricultural sector.[11]

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11) See Hanafi, M. No. 5.

3.3 Average real wages and the productivity of labour:

One of the most important technical coefficient which shows the dgree of effectiveness of employment is the relation between the rate of growth of productivity and that of average real wages for the different activities.

Generally speaking, the rate of growth of average real wages is higher than that of productivity with different degrees for different industries during the period /1960-1965/. If we take the main economic sectors of the economy and the national economy as a whole, the same corollary may be substentiated. In the commodity producing sector, the annual rate of growth of the average real wages was 7,8% and that of productivity was 4.64%. For the tertiary sector, the corresponding rates of growth for the whole economy were 5.75 and 4.04 respectively. However, this situation is improved, to some extent, in the next period.

3.4. Regional Structure of Industrial Employment:

One of the main problems that face underdeveloped countries when planning for industrial development, is to achieve regional balance, specially with respect to human

resources. Many countries have failed to achieve this balance. In the following we shall present the distrib- ution and structure of the industrial labour force in Egypt in 1966, to prove that after more than 10 years of industrial development and planning, this country still suffers from severe concentration of industrial projects, and therefore of industrial labor force in few strategic areas;

To give a fuller and more detailed picture of the absorptive capacity of the Egyptian industry by regions, the industrial units are divided according to the legisla- tive status (i.e. public and private) and according to the size.[12]

This example of regional imbalance in industrial dist- ribution will help us to draw some important conclusions with regards to the drawbacks of such a deplorable stiuation, and to present some useful recommendations, which are the main reasons for discussing the problem in details.

Regional Distribution of Industrial Labour force in Egypt:

Egypt is administratively divided into 25 governorates (including the canal governorates and the oasis). In this

12) In this survey, the industrial units employing less than 10 workers are neglected; other units are divided as follows:
   (1) Stands for the industrial enterprises of 10 to 24 employees.
   (2) Stands for the industrial enterprises of 24 to 49 employees.
   (3) Stands for the industrial enterprises of 50 to 99 employees.
   (4) Stands for the industrial enterprises of 100 to 499 employees.
   (5) Stands for the industrial enterprises of 500 and more employees.

study we shall redivide these governorates into 6 groups:
Great Cairo; Alexandria; Lower Egypt; Upper Egypt; Canal
governorates and the Frontier provinces.

The following table gives us an overall picture of
the aggregate Regional Structure of Industrial Employment
and wages, according to the legislative status of the
industrial units:

Table No. 1
Aggregate Regional Structure of Industrial Employment
and Wages

Regions	Percentage of total number of units		Percentage of total number of workers		Percentage of total wages	
	Pub.	Priv.	Pub.	Priv.	Pub.	Priv.
Great Cairo[13]	41.367	54.308	41.818	62.865	42.198	70.372
Alexandria	14.508	14.081	23.831	13.123	22.150	14.385
Total	55.875	68.389	65.649	75.988	64.348	84.7 7
Lower Egypt	24.221	18.328	20.148	17.065	20.417	11.201
Upper Egypt	13.309	10.285	6.933	5.456	5.610	2.748
Canal Gov.	1.319	0.000	2.719	0.000	3.629	0.000
Frontier Prov.	5.276	2.998	4.551	1.491	5.996	1.294
Total	100.000	100.000	100.000	100.000	100.000	100.000

This table indicates clearly that about 40.6% of the total
public industrial units and 57.8% of the private units were
located in Cairo and Alexandria. This means that there is a

13) Great Cairo includes Cairo, Giza and Kalubia (partially)
All Data are taken from the publications of the Agency for
Mobilization and statistics, Cairo.

severe concentration of industrial enterprises, belonging
either to the public or to the private sector, in these
2 regions. A corresponding concentration of the industrial
labour force naturally follows.

Another phenomenon worthy of attention in this respect,
is the relative higher wages of the industrial workers in
both sectors in these 2 regions, which indicates higher levels
of skill and more advanced types of activities. The share
of Lower Egypt (which includes 8 governorates) does not
exceed 20% of the total industrial employment, although its
share of the total number of industrial units somewhat exceeds
that figure, giving the conclusion that in the average, the
size of the industrial units is smaller than in Cairo and
Alexandria.

With regards to Upper Egypt (8 governorates), we can
see from the previous table that its share of industrial em-
ployment represents 6.9% and 5.5% of the total public and
private employment respectively, while the corresponding
percentages for the number of units were 13.3% and 10.3%.
This indicates again the relative small size of the units
in this region in the average.

The shares of the Canal governorates and of the Frontier
provinces as well as the size of industrial units in them are
even smaller.

After this aggregate picture, we shall now present a
more detailed study of the regional distribution of the in-
dustrial labor force is Egypt, according to the size of the
industrial units and to the occupational structure[14] in order

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14) Due to lack of data, an aggregate structure of the industrial
    labour force is used in this survey. This structure consists
    of two main occupational categories in the case of the public

to discover the different aspects and dimensions of the
problem, and thus to be able to give more comprehensive and
realistic recommendations.

In this study, we shall present, first, a detailed
picture of the structure of industrial labor force in Cairo,
in the public and private sectors separately; then, we shall
present a similar picture for the Gharbia Governorate as
representative of Lower Egypt, for Souhag Governorate as
representative of Upper Egypt, and for the Suez Governorate
as representative of the Canal region. But our survey does
not include the frontier governorates because of the back-
wardness of industrialization in all of them.

A - Structure of Industrial Labour Force in Cairo:

(a) Public Sector in Cairo

Table No. 2

Size of the unit	Units		Employment		The percentage of managerial staff to total number of workers
	No.	%	No.	%	
1	8	3.7	146	0.2	16
2	79	36.2	2899	3.2	15
3	28	12.8	1891	2.1	18
4	59	27.1	14259	16.0	16
5	43	19.7	70030	78.4	16
Total	217	100.0	89335	100	16

sector, administrators (i.e. the managerial staff) and workers,
and of three main occupational categories in the case of the
private sector: owners, administrators and workers. The
"managerial staff" refers to all the labour force in the in-
dustrial units which carry out all the activities not to be
done by workers.

From the previous table, we see that the total industrial labour force in the public sector in Cairo reached in 1966 about 89335. This represented 20.1% of the national public industrial employment, while the total number of the public units represented 26.1% from the total public units, which means that the average size of the industrial unit in Cairo is smaller than the average size on the national level. With regards to the distribution of the industrial public units according to size in Cairo, we find that 52.7% of these units are of the first 3 sizes (i.e. less than 100 employees) while 27.1% of them employ between 100 and 499 employees, and 19.7% only have 500 and more.

This distributional pattern of the public industrial units in Cairo may be partly due to the fact that many of these units were privately owned before nationalization. The proximity to the large consumption market in Cairo encouraged the establishment of consumer goods industries, which are normally medium or small-size industries.

With regards to the occupational structure of the industrial labour force, we shall concentrate our attention on the percentage of managerial staff to total number of workers. According to administrative concepts, this percentage is supposed to increase with the size of the unit. But from the previous table, we see that the managerial staff reaches 16% of total number of the workers in the public sector in the first, fourth and fifth sizes, while it reaches 15% in the second and 18% in the third size. In other words, against all administrative rules, the percentage of managerial staff to total workers is almost stable in all units, disregarding the differences in size.

(b) <u>Private Sector in Cairo</u>

Table No. 3

The size of the units	Units		L.F.		The percentage of managerial staff to total number of workers.
	No.	%	No.	%	
1	1166	67.1	17684	29.8	5
2	381	22.0	12826	21.6	6
3	110	6.3	7480	12.7	9
4	74	4.3	13926	23.5	10
5	8	0.5	7360	12.4	24
Total	1739	100.00	59276	100.00	9

Table No. 3 shows large differences between the distribution of labour force in the private sector & its distribution in the public sector, either according to the size of the units or to the occupational structure: 67.1% of the private units are of the first size, 28.3% in the second and third, 4.3% in the fourth and 0.5% employ more than 500 workers (8 units in all).

The percentage of managerial staff increases, in accordance with administrative concepts, from 5% in the first size and 6% in the second, to 24% in the fifth. This rapid increase is partly due to the omission in the previous table, of the total number of owners acting really as managers, and who represented a more important percentage in the small sizes.

The relevance of these different distributional and structural aspects of the industrial labour force in the public and private sectors to the problem of regional absorptive capacity by sectors in Egypt . will be discussed later, after presenting the other examples chosen for this study.

B - A Governorate from Lower Egypt: El Gharbia

    (a) Public Sector in El-Gharbia

Table No. 4

The size of the units	Units		L.F.		The percentage of managerial staff to total number of workers
	No.	%	No.	%	
1	1	2.3	22	0.06	9
2	4	9.1	159	0.42	20
3	10	22.8	772	2.0	20
4	20	45.5	3918	10.2	16
5	8	18.2	33613	87.3	21
Total	43	100.0	38484	100.0	20

In this governorate, the structure of the public industrial units according to size differs considerably from the structure existing in Cairo: 86.5% of the units are of the three big sizes, which reflects the noticeable position of the industrial public activities. For this reason, the total number of the public labour force was relatively high and reached about 78% of the total industrial labour force in the governorate.

On the other hand, the relative high percentage of the administrative staff attracts the attention, specially when compared with Cairo. This indicates the better situation of the industrial units in El-Gharbia from the point of view of administration, at least as regards their percentage of managerial staff.

(b) **The private Sector in El-Gharbia**

Table No. 5

The size of the units	Units		L.F.		The percentage of managerial staff to total number of workers
	No.	%	No.	%	
1	188	64.8	2517	30.1	2
2	78	26.9	2292	26.1	2
3	15	5.2	953	10.5	2
4	8	2.7	1683	18.8	5
5	1	0.35	1254	14.5	9
Total	290	100.00	8699	100.00	4

Two very quick observations can be derived from table No. 5. The first is that the size of private employment is relatively very small, as it reaches only 8699 persons, (i.e.: about 22% of public industrial employment in the governorate.) The second observation is the very low perdentage of the administrative body in the private sector in this governorate. This low share of administration is due mainly to two factors:

* the simple nature of the private activities in this governorate as reflected in the concentration of private units in the smallest sizes.
* And the omission of the owners as part of the administ staff.

C - **Strcture of Industrial Labour force in Upper Egypt:**

In Upper Egypt as a whole, the industrialization process is relatively new and the rate of industrialization is rather slow either for the public or the private sector.

(a) <u>The Public Sector in Souhag</u>[15]

Table No. 6

The size of the units	Units		L.F.		The percentage of managerial staff to total number of workers
	No.	%	No.	%	
1	4	18.18	66	2.20	12
2	7	31.82	253	8.30	15
3	3	13.63	235	7.70	12
4	6	27.27	943	30.90	28
5	2	9.10	1549	50.80	7
Total	22	100.00	3046	100.00	15

We see from the above table that the total number of industrial employment in the public sector was 3046 workers only of whom 18.2% were engaged in units of the first three sizes.

The total number of public industrial units is 22, of which only two units (9.16%) are of the big size; the contribution of the administration is very moderate, reaching only 15% of total employment, and the ratio of administration for the different sizes followed no rule at all as it was 12% for the first size, 28% for the fourth and 7% only for the largest one. From these observations we can conclude that there are many relevant differences between the structure of industrial labour force in the public sector in Souhage and the corresponding structure in other regions of Egypt.

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15) In this survey, Souhag is taken as a good representative of Upper Egypt, since Aswan has special circumstances due to escetion of the High Dam, the hydro-electric power stations and other related projects.

(b) Private Sector in Souhag.

Table No. 7

The size of the units	Units		L.F.		The percentage of managerial staff to total number of workers
	No.	%	No.	%	
1	22	88.0	266	70.2	3
2	3	12.0	113	29.8	4
3	-	-	-	-	-
4	-	-	-	-	-
5	-	-	-	-	-
Total	25	100.00	379	100.00	3

The private industrial activity in this governorate, as a sample of Upper Egypt, is very limited: only 25 units employing not more than 379 persons. The units were distributed among the first two sizes of units in the ratios: 88% and 12% respectively, this can be taken as an indicator as to the primitive nature of private industrial activities in this governorate. If we add the previous observation that the scope for agriculture activity in Upper Egypt is also limited, we can put our hands on the main resons for unemployment and emigration from this region.

D - Structure of Industrial Labour Force In the Canal Governorates

As previously said, the Suez governorate is taken in this survey as a representative of the whole region.

(a) The Public Sector in Suez

Table No. 8

The size of the units	Units		L.F.		The percentage of managerial staff to total number of workers
	No.	%	No.	%	
1	2	16.7	25	0.19	16
2	1	8.4	40	0.30	20
3	1	8.4	74	0.55	5
4	3	25.0	941	7.0	17
5	4	33.4	12445	92.0	20
Total	12	100	13525	1.00	19

In table No. 8 we first notice the predominence of the big units: 58.4% of the total number of public units are of the two biggest sizes. This is due to the fact that special types of industrial activities were set up in Suez such as fertilizers plants, petroleum refineries, and petro-chemical factories, and this because of its proximity to the oil fields.

The total number of employed is relatively large: 13525 workers, of whom 19% are on the managerial staff.

(b) The Private Sector in Suez:

Table No. 9

The size of the units	Units		L.P.		The percentage of managerial staff to total number of workers
	No.	%	No.	%	
1	40	95.2	533	87.8	4
2	2	4.8	74	12.2	12
3	-	-	-	0	0
4	-	-	-	0	0
5	-	-	-	0	0
Total	42	100	607	100	5

In Suez, only 42 private units were involved in industrial production, 95.2% of these units were of the first size, and all the rest of the second size. The total private employment does not exceed 607 workers, of whom only 5% are on the administrative staff. This is due to the fact that the handicraft activities, requiring high level of skill and a relatively low level of administration were the prevailing ones in this sector.

To get a historical trend of the regional distribution of the industrial activities, table No. (12) in the Appendix shows the situation in 1962.

Upper Egypt) are very industrially backward. If we add to this
the existance of redundant labour in the agricultural sector
in these governorates, we understand better the extent of the
problem, and the urgent need to increase the absorbability of
the industrial sector in all rural areas in a blanced manner.

6. With regards to the regional distribution of the indus-
trial units according to size, we notice: first, that most of
the large size industrial units are located in Cairo, Alexan-
dria, Suez and Aswan, and that the majority of these large units
are owned by the pbulic sector. This last observation illustra-
tes the important role that this sector can play in the future
to ensure a better regional distribution of industrial activities
in Egypt, and thus to increase the absorptive capacity of the
industrial sector as a whole.

7. The disparity of the regional distribution of managerial
skills in Egypt is clear in the previous study. These skills are
an important element in economic development, at the same time,
they represent the bottleneck in the industrialization process in
most underdeveloped and developing countries, because they need
a long time of practice and experience to be formed. The concen-
tration of managerial skills in Cairo and Alexandria deprives other
regions of Egypt of their beneficial effects as important and
crucial factors of production.

Furthermore, this concentration of managerial skills in
the main urban areas, in addition to the severe concentration of
industrial employment opportunities in the same areas, naturally
leads to deep difference between the average wage and therefore

the standard of living in urban and rural areas. This means that some regions of Egypt have better opportunities of economic and social development than others.

8. This disparity of opportunities in Egypt leads to undesired movement of labour from rural to urban areas. These movements create many well-known social and economic problems in the urban areas; at the same time, they often cause severe unbalance between the demand for labour and its supply on the regional level.

In short, we can say that the disparity of industrial employment opportunities between regions leads to unbalanced regional development from the economic, social, and cultural points of view and does not help to increase the absorptive capacity of the economy as a whole.

Finally we shall give herunder some recommendations concerned mainly with the regional distribution of the industrial activities, including industrial employment, due to its crucial importance in developing countries.

In a country which has chosen planning and industrialization as means to achieve economic and social development, the achievement of a balanced regional distribution of industrial units assumes a big role, specially with regards to the difusion of the benefits of development and to its effects on the total absorptive capacity of the industrial sector.

To achieve the desired balanced regional distribution of industrial activities and labour force, to give any regional planning process a better chance of fulfillment and success, some preliminary steps must be undertaken, as undispensable pre-requisites:

(a) a comprehensive study of the available resources on the regional level (specially the existing manpower) must be undertaken. This will assist in following better policies aiming to make the best use of these resources in each region and will have a decisive influence on the unplanned and undesired internal migration.

(b) a thorough coordination must be established between the different institutions in replanning the educational and training systems, in order to fulfill the different demands of the industrial enterprises with the required educational levels and skills from the manpwoer available in each region.

With the help of the detailed data regarding the distribution of resources according to regions, an employment plan can be drafted; this plan should take into consideration the regional distribution of the industrial units in addition to the size factor, in order to realize the maximum possible working opportunities within the industrial sector as a whole. In this respect, interrelation between this sector and the other sectors of the economy should be always in mind.

The best regional distribution of industrial units and labour force should try to avoid the economic and social results of the present distribution as previously discussed, and should

therefore take into consideration all economic, social as well as strategic and legislative factors.

1. Economic Considerations:

By economic consideration we mean, the distribution of the industrial investments between the different regions; this distribution must be planned taking into consideration the cost of production, quality, the surplus and the probable risk. These objectives can be easily reached if the planners give due attention to the following factors:

- availability of raw materials,
- availability of the different required levels of skilled and unskilled labour, and the possibility of preparing them in a suitable period from the existing labour force, and with minimum costs.
- proximity to markets,
- the best climatic conditions for each type of industries, since some industries are greatly influenced by such conditions (e.g., textile industry.)
- the avoidance of using the scarce arable land as much as possible for establishing the industrial enterprises.

2. Social Considerations:

Social development must be balanced on the regional level, in order to increase the absorptive capacity of industry in rural areas, and thus to avoid any undesirable movement of the labour force.

Unfortunately, it is sometimes extremely difficult to realize the economic and social aspects simultaneo usly. For example, for social considerations, it was decided to establish a textile factory in Quena which is considered as a backward region, and this, in spite of the fact that the cost of the produced unit is higher, and its quality lower than the corresponding unit produced in Lower Egypt.

The best decision should aim at minimizing as much as possible the contradication between the economic and the social objectives. The planners should bear in mind the long term objectives of maximizing to achieve them as economically as possible.

3. Strategic Considerations

In the Suez Canal Governorates, there were 163 industrial enterprises in 1966. After June 1967, almost all of these enterprises stopped production due to war conditions, and about 22 056 workers stayed without any real productive work for a long time. This situation could have been avoided in great part if the planners had considered the strategic factors when allocating the industrial projects. However, the type of investment and production plays a considerable role in the strategy of allocation. Therefore, long run studies and forecasts must be carried out to ensure minimum risk to the industrial projects, specially the big size units. This, of course, has a strong impact on sustaining and increasing labour absorption of industry.

4. Legislative Consideration

One of the important conclusions that emerged from the previous study, was the necessity of a wider expansion and participation of the public sector, in order to increase labour absorption, particularly in the long run.

To promote industrial development in the backward regions, and thus to increase the absorptive capacity of the industry, the appropriate infra-structure must be implemented, and this is beyond the means of the private sector. The priorities of establishing the required infra structure should be planned in order to avoid any conspicuous disparitiez between regions.

It is clear from the previous study that regional planning of industrial development is particularly important with regards to the absorbability of the industrial sector as a whole, that it involves many problems concerning the size of the units, the structure of the labour force and the suitable infra-structure, and that it must take into consideration many diversified economic, social, strategic, climatic and legislative factors.

In other words, developing countries face a great challenge and a difficult problem on their strive to achieve balanced regional industrial development.

STATISTICAL APPENDIX

Table No. 1
Average Rates of Growth of Population, National Income and Per Capita Income
/1952-53 - 1968-69/

Average annual rate of growth Period	Population	National Income		Income per Capita	
		at current prices	at fixed prices	at current prices	at fixed prices
1st period 1952/53 - 1959/60	2.4	6.9	4.4	4.4	2
2nd period 1960/61 - 1964/65	2.8	9.0	6.5	6.1	3.7
3rd period 1965/66 - 1966/67	2.8	5.4	2.4	3.0	1.6
4th period 1966/67 - 1968/69	2.9	-1.2	- 3.3	- 6.6	- 6.5

Source: M.N. Hanafi, "Labour Absorption in the Egyptian Economy",
PHD Dissertation, SGPIS, 1973 p. 32.

Table No. 2

Gross Domestic Product, Gross Consumption, Gross Domestic Saving,
Total Investment and Deficit of total Domestic Savings during
the Period /1960 - 1969/

/in current prices and million pounds/

Year	Gross Domestic Product /1/	Gross Consumption /2/	Gross Domestic Savings /3/	Domestic Consumption Ratio /2/1/	Domestic Saving Ratio /3/1/	Total Investment /4/	Deficit or Surplus /3-4/	The Rate of Deficit to Investment / 3-4/4/
Base year 1959/60	1375.6	1199.7	175.9	87.2	12.8	171.4	/+4.5/	/2.6/
/1960-55/	1719.1	1500.0	219.1	87.3	12.7	1513.0 /17.6%/	- 417.4	27.6
/1965-69/	2311.3	2068.0	243.2	89/5	10.5	1515.0 /16.3%/	- 210.7	13.9

Source: Ibid /Recompiled/, PP. 40, 41.

- 38 -

Table No. 3

Percentage Distribution of the Value of Production
of the Manufacturing industries in Arab Republic
of Egypt during The Period 1950 / 1970.

Year Major Groups	1950	1959/60	1964/65	1969/70
Consumer good industries	74	65	49	49
Intermediate good industries	24	29	43	44
Capital good industries	2	6	8	7
Total	100.0	100.0	100.0	100.0

Source: Ibid., p. 60.

Table No. 4

Percentage of Employment Absorption by Economic Sectors

Year Activities	1937	1947	1960	1964/65	1968/69
Agriculture	69.5	61.9	56.3	51.5	49.3
Industry	6.5	8.9	9.8	16.3	15.6
Services	24.0	29.2	33.9	32.2	35.1
	100.0	100.0	100.0	100.0	100.0

Source: Ibid., /Recompiled/ pp. 202, 274.

Table No. 5

Employment and Unemployment Ratios

Numbers are in 1000

Year	Civil Labour Force /1/	Total Employment /2/	Total Unemployment /3/	Employment Ratio /2/1/	Unemployment Ratio
1959/60	6711.0	6006.0	705.0	89.5	10.5
1964/65	7918.0	7333.4	584.6	92.6	7.3
1968/69	8762.0	8051.2	710.8	91.9	8.1

Source : Ibid., p. 283

Table (6) EMPLOYMENT BY SUB-SECTORS

Sectors	(1) Number of establishments	(2) Employees		(3) Annual Wages		(4) Average number of employees per est. (=2 ÷ 1)	(5) Average annual wages £ (=3 ÷ 2)
		Number	%	£ 000's	%		
(1) Foodstuffs (including beverages and tobacco)	11,191	38,776	13.6	1,714	25.4	3.5	44
(2) Textiles.	14,483	31,770	11.1	512	7.5	2.2	16
(3) Footwear, other wearing apparel and made-up textile goods.	58,209	90,679	31.8	1,425	21.1	1.6	16
(4) Wood and cork products except furniture.	9,972	16,196	5.7	251	3.7	1.6	15
(5) Furniture and fixture	15,437	27,828	9.8	586	8.7	1.8	21
(6) Leather and leather products except footwear.	1,206	3,349	1,2	143	2.1	2.8	43
(7) Non-metallic mineral products exept products of petroeum and coal.	2,634	8,715	3.1	341	5.1	3.3	39
(8) Metal products except machinery and transport equipment.	13,605	28,524	10.0	687	10.1	2.1	24
(9) Transport equipment	8,648	18,627	6.5	390	5.8	2.2	21
(10) Others	9,171	2,670	7.2	711	10.5	2.3	34
Total	144,556	285,134	100.0	6,759	100.0	2.0	24

Table(7) COMPONENTS OF VALUE ADDED BY SUBSECTORS

BBo

Sectors	(1) Value of gross output	(2) Production requirements	(3) Value added (=1-2)		(4) Wages		(5) Rents to ownership 5.1 Rents		5.2 Interest & Profits	
			amount	%	amount	%	amount	%	amount	%
(1) Foodstuffs (including beverages and tobacco)	4o,619	37,023	11,596	20.6	1,714	25.4	707	20.2	9,175	19.9
(2) Textiles.	10,022	6,058	3,964	7.0	512	7.5	172	4.9	3,280	7.1
(3) Footwear, other wearing apparel and made-up textile goods.	24,430	10,671	13,759	24.4	1,425	21.1	925	26.3	11,409	24.7
(4) Wood and cork products except furniture.	5,024	2,326	2,698	4.8	251	3.7	133	3.8	2,314	5.0
(5) Furniture and fixture	12,771	6,032	5,939	10.5	586	8.7	422	12.0	4,931	10 .7
(6) Leather and leather products except footwear.	4,540	3,217	1,323	2.3	143	2.L	61	1.7	1,119	2.4
(7) Non-metallic mineral products except products of petroleum and coal.	5,681	3,112	2,569	4.6	341	5.1	127	3.6	2,101	4.5
(8) Metal products except machinery and transport equipment.	12,365	6,539	5,826	10.3	687	10.1	335	6.5	4,804	10.4
(9) Transport equipment	5,3o6	2,136	3,250	5.7	390	5.8	277	7.9	2,583	5.6
(10) Others	13?320	7,788	5,532	9.8	711	10.5	354	10.1	4,467	9.7
Total	142,158	85,702	56,456	100.0	66756	100.0	3,513	100.0	46,164	100.0

Source: Ibid.,

Table 8 SOME LABOUR PRODUCTIVITY CRITERIA

Sectors	Value added per employee £	Value added per £1 of wages
(1) Foodstuffs (including beverages and tobacco).	298	7
(2) Textiles.	116	8
(3) Footwear, other wearing apparel and made-up textile goods.	152	10
(4) Wood and cork products except furniture	167	11
(5) Furniture and fixture	213	10
(6) Leather and leather products except footwear	395	9
(7) Non-metallic mineral products excepts products of petroleum and coal.	295	8
(8) Metal products except machinery and transport equipment.	204	9
(9) Transport equipment	175	8
(10) Others	268	8
Total small industry	198	8
All industry	581	3

Source: Ibid.,

Table (9) - SIZES OF INDUSTRY
(according to number of persons employed)

	10-49 persons	% to total	50-99 persons	% to total	100-499 persons	% to total	500 persons and over	% to total	Total	%
A- Number of Establishments										
1961	3,173	78.3	377	9.3	390	9.6	111	2.7	4,051	99.9
1962	3,155	78.1	372	9.2	373	9.2	135	3.3	4,035	99.8
B- Number of Employed Persons										
1961	66,698	18.1	26.148	7.0	83.867	22.7	191,966	52.0	368,679	99.8
1962	67,313	16.0	25,483	6.0	81,945	19.4	247,082	58.5	421,823	99.9
C- Value Added (in £m.)										
1961	15.6	9.1	9.7	5.6	37.9	22.2	107.6	62.9	170.8	99.8
1962	16.1	7.4	10.2	4.7	36.3	16.8	152.9	70.9	215.5	99.8
D- Value of Output (in £m)										
1961	83.4	15.0	38.3	6.9	107.6	19.3	325.6	58.6	554.9	99.8
1962	84.3	13.0	40.3	6.1	100.7	15.5	422.7	65.3	648.0	99.9

Table (10)- LABOUR AND WAGES (Industrial Sectors)

Industries	1961					1962				
	No. of employed persons	% to total	Wages & Salaries in £000's	% to Total	Annual Average Wage in £	No. of employed persons	% to total	Wages & Salaries in £000's	% to Total	Annual Averag Wage i £
A- Extractive:										
Crude oil	3,243	0.9	2,363	4.1	729	2,437	0.6	1,387	1,9	569
Mining	9,595	2.6	1,656	2.9	173	10,284	2.4	1,894	2.6	184
Total	12,838	3.5	4,019	7.0	313	12,721	3.0	3,281	4.5	258
B- Manufacturing:										
Spinning and Weaving (including cotton ginning & perssing).....	158,466	43.1	23,583	40.9	149	178,003	42.2	29,875	41.6	168
Foodstuffs (iincluding beverages & tobacco)......................	69,259	18.7	8,843	15,4	128	84,649	20.1	11.410	15.9	135
Chemicals (including paper, printing, rubber & leather)	41,764	11.3	6.674	11.5	160	46,789	11.1	8.620	12.1	184
Metallurgical (basic & non-basic) mechanical (electric & non-electric) and transport equipment.....................	38,047	10.3	6,326	11.0	166	45,715	10.8	8.662	12.1	189
Building Materials & Ceramics	20,112	5.5	3,143	5.5	156	24,935	5.9	3,755	5.2	151
Wood & Furniture	9,946	2.7	1,177	2.0	118	9,430	2.2	1,713	2.4	182
Ready-made Clothes & Shoes	8,063	2.2	1,183	2.1	147	10,586	2.5	1,426	2.0	135
Petroleum Products	3,863	1.0	1,645	2.9	426	5.591	1.3	2,541	3.5	454
Other industries	3,398	0.9	321	0.6	94	2,770	0.7	303	0.4	109
Total	352,918	95.7	52,895	91.9	150	408,458	96.8	68,305	95.2	167
C- Electricity & Gas	2,923	0.8	655	1.1	224	634	0.2	137	0.2	216
Grand Total	368,679	100.0	57,569	100.0	156	421,823	100.0	71,723	99.9	170

Source : Ibid.,

Table (11) - VALUE ADDED AND VALUE OF OUTPUT
(by Industrial Sectors)

Industries	1961				1962			
	Value Added in £000's	No. of employed persons	Per Capita Value Added in £	Value of Output in £000's	Value Added in £000's	No. of employed persons	Per Capita Value Added in £	Value of Output in £000's
A- Extractive :								
Crude Oil	8,410	3,243	2,593	12,474	3,440	2,437	1,412	5,403
Mining	3,125	9,595	325	5,429	4,619	10,284	499	5,982
Total	11,535	12,838	899	17,903	8,059	12,721	634	11,385
B- Manufacturing:								
Spinning and Weaving (including cotton ginning & pressing)	49,631	158,466	313	169,055	66,316	178,003	373	173,663
Foodstuffs (including beverages & tobacco).....................	48,429	69,259	699	205,813	52,535	84,649	621	236,005
Chemicals (including paper, printing, rubber & leather)....	26,055	41,764	624	68,842	31,870	46,789	681	78,189
Metallurgical (basic & non-basic) mechanical (electric & non-electric) and transport equipment	15,512	38,047	408	45,602	28,371	45,715	621	77,952
Building Materials & Ceramics	8,033	20,112	399	18,551	11,210	24,935	450	23,219
Petroleum Products	3,871	3,863	1,002	9,377	8,928	5,591	1,597	25,592
Ready-made Clothes & shoes	2,395	8,063	297	6,135	4,020	10,586	380	9,681
Wood & Furniture	2,094	9,945	211	6,901	3,075	9,430	326	7,851
Other industries...................	1,041	3,398	305	2,595	1,049	2,770	379	3,135
Total.............	157,061	352,918	445	531,582	207,374	408,468	508	635,287
C- Electricity & Gas	2,237	2,923	755	2,623	83	634	131	320
Grand Total	170,833	368,679	463	554,911	215,516	421,823	511	647,992

Source: Ibid.,

Table 12 - GEOGRAPHICAL DISTRIBUTION (by Industrial Sectors)
1962

Industries	Cairo			Alexandria			Lower Egypt			Upper Egypt			Canal and Frontiers		
	No. of establish-ments	No. of employed persons	%	No. of establish-ments	No. of employed persons	%	No. of establish-ments	No. of employed persons	%	No. of establish-ments	No. of employed persons	%	No. of establish-ments	No. of employed persons	%
A- Extractive:															
Crude Oil	—	—		—	—		—	—		—	—		—	—	
Mining...................	2	850	0.5	2	500	0.6	2	574	0.4	7	3,413	5.1	3	2,437	11.6
TOTAL	2	850	0.5	2	500	0.6	2	574	0.4	7	3,413	5.1	9	4,947	23.6
													12	7,384	35.2
B- Manufacturing:															
Spinning & Weaving (including cotton ginning & pressing)..	235	27,309	26.8	73	45,643	49.8	448	93,777	66.5	74	10,068	15.2	3	1,186	5.6
Foodstuffs (including beverages & tobacco).....................	489	17,862	17.6	225	14,426	15.8	567	15,053	10.6	326	35,535	53.4	67	1,773	8.5
Chemicals (including paper, printing, rubber & leather)...	263	15,946	15.6	92	14,173	15.6	39	9,042	6.5	10	3,428	5.2	4	3,200	15.3
Metallurgical, mechanical & transport equipment..........	261	17,802	17.6	98	9,762	10.7	63	8,212	5.8	22	8,011	12.0	18	1,928	9.2
Building Materials & Ceramics	84	5,363	5.2	30	2,392	2.6	102	9,128	6.5	59	4,881	7.3	9	211	1.0
Wood & Furniture	132	6,033	5.9	33	1,462	1.6	49	1,028	0.7	13	788	1.2	6	99	0.5
Clothes & Shoes.......Ready-made	175	4,802	4.7	21	1,709	1.9	29	4,014	2.8	3	61	0.1	—	—	
Petroleum Products	1	12	0.01	1	410	0.4	—	—		—	—		2	5,169	24.7
Other industries.............	44	1,339	1.3	21	811	0.9	8	310	0.2	10	310	0.5			
TOTAL	1,685	100,468	98.7	591	90,748	99.3	1,105	140,564	99.6	517	63,102	94.9	109	13,556	64.8
C- Electricity & Gas	1	507	0.5	2	127	0.1	—	—		—	—		—	—	
GRAND TOTAL	1,688	101,845	100.0	595	91,375	100.0	1,107	141,138	100.0	524	66,515	100.0	121	20,950	100.0

Source : Ibid.,

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