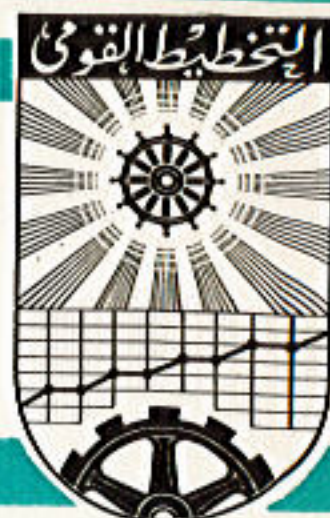


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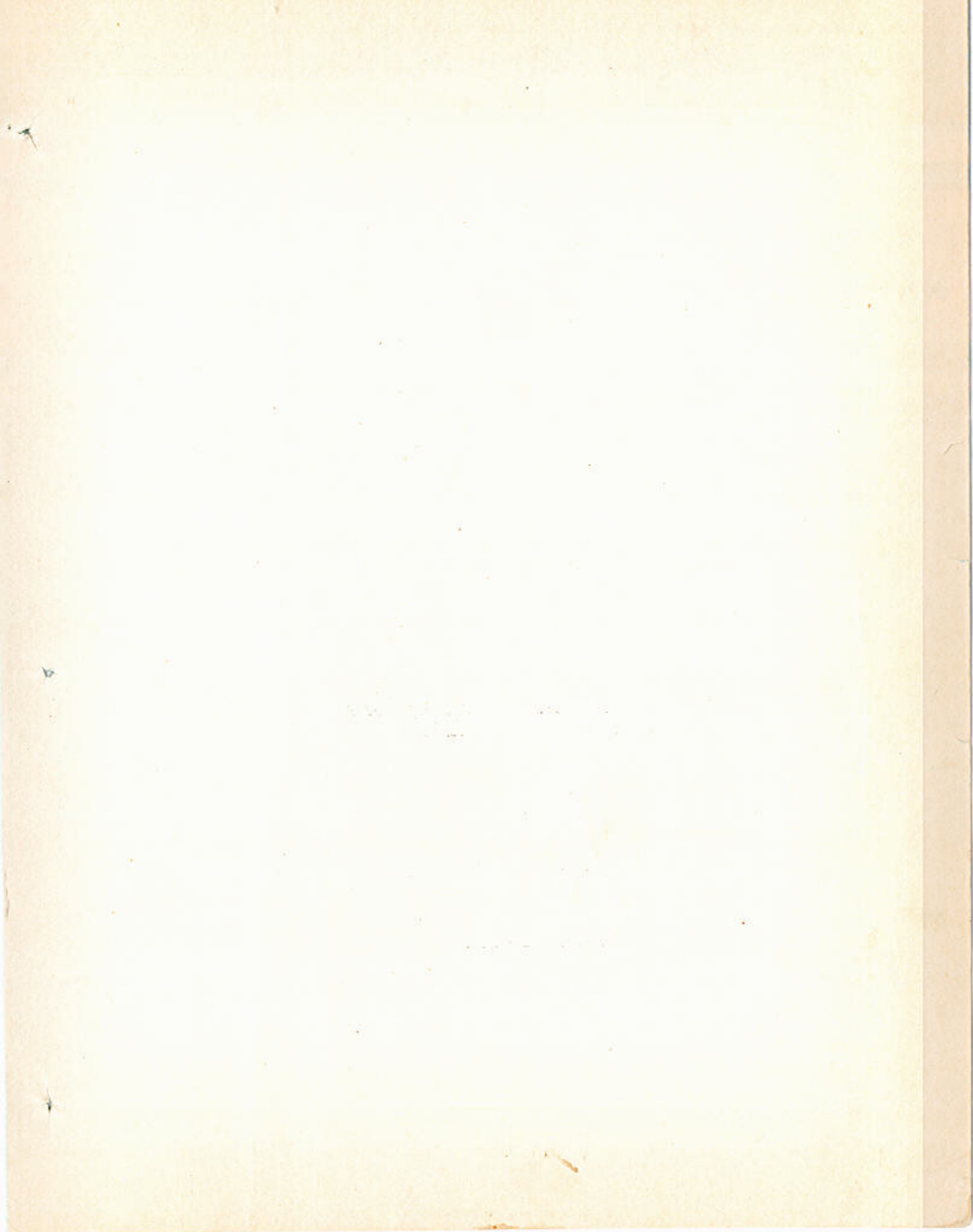
Memo. No. 161

MANPOWER PLANNING AND TRAINING
TOPICS FOR CONSIDERATION

by

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January 1961.





PROBLEMS OF ACCELERATED GROWTH & MANPOWER

PLANNING IN DEVELOPING COUNTRIES

Cairo, Jan. 3rd - 10th 1962

MANPOWER PLANNING AND TRAINING

TOPICS FOR CONSIDERATION

Submitted by

A.M. El-ABD .

Permanent Committee For Manpower Planning

U.A.R.

Organization for Manpower

Development

1. Manpower is the main factor of progress & development in all stages & for all countries. It is the only requirement unavailable through importation or substitution of any kind.
2. Time factor has to be considered in the creation of reliable skilled and professional personnel.
3. The moral element involved in this problem is of utmost importance.

The Planning Stages:

1. The unity of the manpower problem & hence the necessity of tackling it on the highest level possible to ensure coordination, cooperation & support of all concerned
2. The possibility of handing the planning part of the problem to a ministerial committee, aided by a manpower secretary that coordinates all efforts required & studies problems & ensures that correct information is submitted & suitable suggestions are laid down for decision.
3. Variety of channels of responsibility & the magnitude of numbers of personnel involved, & consequently the necessity of foundation of suitable councils with proper responsibilities for planning & coordination. Examples of

Vocational & Technical training.
Engineering education.
Management Development.
Methods & Organization for productivity.
Translation, Editing & publishing.
Manpower Relations & Wages.

The Execution Stage :

1. Representation of all sides in respective councils, & committees, manpower secretary activity kept informed.
2. Role of ministers in direction of policies & in executive work.
3. Role of industry, agriculture & commerce & their cooperation with training establishments for mutual benefit in all levels, sectors & regions.

4. Legislations necessary for the realization of such cooperation.
5. Key Ministers concerned:

Ministers of : Education.
Higher Education.
Labour.

Other Ministers have a sharing role in respect of their manpower requirements.

6. As experience grows & appreciation is attained more unification of efforts could be reached.



The following note presents a short review of the design of National Accounts that was adopted over the period from 1955 up to the end of 1960 at the national planning commission.

In reading the following pages, the statements, should therefore, be taken to describe one historical stage of the effort undertaken, by the technical secretariat, in preparation for the construction of the first five year plan.

It was written in connection with a conference on National Accounting which was attended by a group of African experts in Addis Ababa in June 1960. At that time work on National Accounting, on both theoretical and statistical levels, was at its full swing. Since then interest in this field gave way to, presumably, other more pressing subjects. At the time of writing this introductory note one may correctly, but regretfully, describe such interest as being at a stand still.

When first conceived, the design aimed at serving certain very specific purposes, amongst which planning, within a given institutional set up was foremost. Since then, it has been outmoded by the newer "design" adopted in the Annual Plan Documents. This latter design is unique in more than one sense. To begin with, the de-

definition of the "productive" activities undertaken within the economy is widened to include activities undertaken by the Public Administrations. Accordingly, where all purchases of goods and services were previously treated as intermediate to "Collective" Consumption of society, in the second version they are treated as purchases intermediate to production. This procedure, as is well known, remains always a prerogative of the designer, who is concerned with serving specific uses. But the "novel" part of the new design is the manner in which the very same activities of the sector of Public Administrations are treated simultaneously, both as productive and as leading to final consumption. Such duality in the treatment of the Public Sector appears to stem primarily from the desire to reconcile the rapidly expanding role of the State in the field of real-income distribution (through collective services, e.g. health, education, etc.) and the impelling desire to defend the "useful" nature of such activities on grounds of productivity.

A second important difference lies in the measurement of Gross production at market price. Specifically, it arises in connection with the Sector of Trade. Where as in the earlier design gross production by trade, at market price, was measured inclusive of

indirect taxes (tariffs included) - subsidies, the newer version excludes customs and indirect taxes (?) as a means of avoiding double count. In this case the meaning of double count appears to be the confusing is sue.

Aside from the above major divergencies, between the two designs, all other differences are due primarily to changes in the nomenclature of commodities, sectors and transactions.



4. In so far as the commodities are concerned, the balances distinguish among 10 major commodity groups, namely :

- 1) Agricultural Products
- 2) Foodstuffs
- 3) Raw Materials
- 4) Semi Manufactured Goods
- 5) Products Used for Providing Energy
- 6) Mechanical Products
- 7) Yarn and Textiles
- 8) Construction and Other Products, and
- 9) Other Products, and
- 10) Services.

Each is further divided into subgroups, following the importance of the commodities included in each, adding up to some 74 categories of goods and services.

In choosing the particular groupings adopted for the goods, and services, use was made of a dual criteria. First and foremost, it was essential that commodities (or groups of commodities) of strategic importance be distinguished separately. By strategic importance is meant the special place of importance assumed by certain commodities in determining the rate and pattern of economic growth. This explains the distinction made among the major agricultural products, primarily, cotton, food grains and livestock. It also explains the particular importance attached to capital goods. Similar explanations could be given for the separation of such commodity groups as basic metal products, yarn and textile, electricity, refined petroleum etc. .



A Second criteria adopted is the stage of processing exercised upon the commodity. This is done with the express purpose of facilitating the movement to the type of aggregation of commodity flows, adopted in an input-output table.

In classifying services the overwhelming factor, in determining the adopted breakdown, is the availability of information. Despite the relative wealth of information available about primary and secondary activities very little information is collected, on a systematic basis, about the tertiary activities. Accordingly there is very little room for choosing among the different aggregations.

The balances of transfers distinguish among some 10 main classes of monetary transactions. Each is further subdivided, giving rise altogether to some 30 subcategories. But in actual application, the availability of data was such as to allow the use of the more detailed breakdown only in the case of government transactions. Transactions of other economic agents are classified, mainly in the more summary form.

The distinction among the major categories of this second group of transactions is, essentially, dictated by the desire to single out the classes which are of greater analytical and policy implementational significance. This explains, for example, the separate treatment of three types of profit disbursements, by the business sector, namely:

- a) dividends paid by the private organized (corporate) group of enterprises,
- b) Profits paid by public enterprises to general government ,
- c) Profits of the unorganized (non-corporate) group of enterprises, transferred to households.



The differences in the possibility of controlling each of the above disbursements should be very clear.

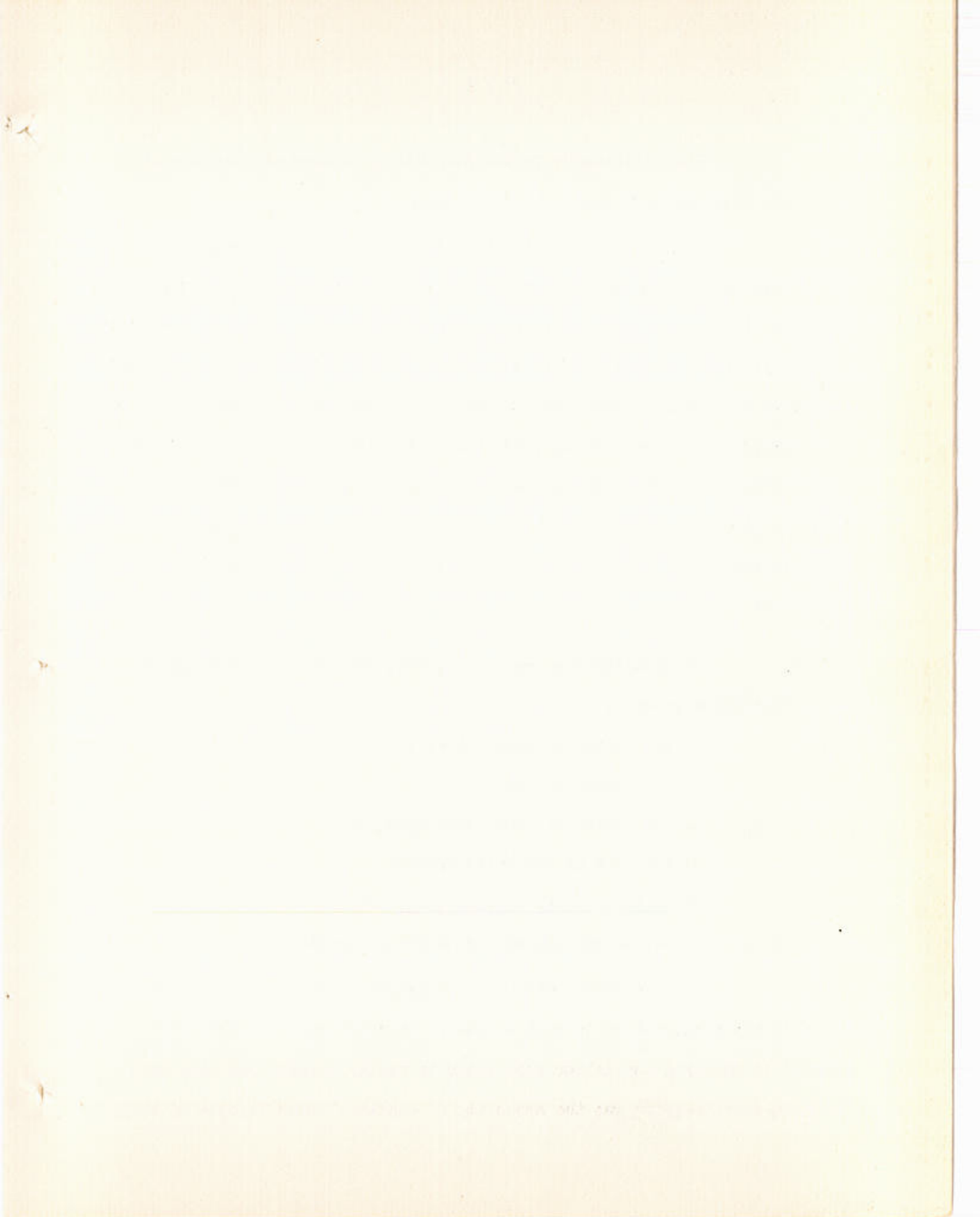
The balances of financial transactions, in the meantime distinguish among four major types of claims: a) claims arising among non financial agents, on the one hand, and financial intermediaries on the other (as debtors); b) claims arising among non-financial agents; c) claims arising among financial intermediaries, and ; d) claims arising among financial intermediaries, on the one hand, and financial intermediaries on the other (as creditors). Each of these classes is further divided according to the duration of claims involved and the relationship that is established among domestic agents and the external world. Altogether there are some 40 sub-classes of claims.

5. In grouping the economic agents, the accounts distinguish among four major groups :

- a) The sector of enterprises ;
- b) The household sector ;
- c) The sector of administrations , and
- d) The rest of the World sector.

The main activity of the agents belonging to the first sector is production, of the second and third is consumption.

The sector of enterprises consists of both privately owned and directed institutions as well as public institutions. The criterion adopted in choosing the latter sub-sector is really complex and once more the main consideration was the necessity of distinguishing aspects of public



economic activity which assume, more or less, a relatively strategic role when regarded from the view point of national development effort. This explains to a large extent the inclusion of the Land Reform Organization, Public Estates, the Military Factories engaged in civilian production, the Suez Canal, .. etc.

The social insurance and security funds, which were treated in the 1954 accounts as part of the financial group of public enterprises, is treated in consequent accounts as part of the sector of administrations.

Within the business sector, economic agents are grouped according to their main activities into 12 major branches of economic activity, and some 87 sub-branches. Each sub-branch is further classified according to the institutional form characterising its organizations. Thus the organized sector consists of public enterprises and corporations (companies subject to law 26 for 1954). All other enterprises are included in the non-organized sector.

The sector of households constitutes, in point of fact, a combination of economic agents which it is hard to define precisely. This is due to the :

- a) residual character of its commodity and financial transactions and as well as agents included, and
- b) the manner in which the applications of the concept of territoriality to production and expenditure leads to the inclusion of all temporary residents within the group of households. But as a matter of principle it should exclude all non-profit private institutions, foreign and international organisations, and general government agencies. But, it must be pointed out, that the 1954 accounts included all these institutions except for the last sub-group of agents. For reasons of statistical expediency they included even the British Troops and families placed in Egyptian Territory.



While the initial design allows for a breakdown of the household sector in accordance with certain socio-economic considerations, so such breakdown is undertaken in the 1954 accounts. It would seem that any further efforts along this line would have to await the availability of additional information, originating from the more recently initiate national consumption surveys.

The sector of administrations, meanwhile consists essentially of public agencies engaged in general government activity, together with private non-profit institutions. It also includes the social security fund administrations for employees by both the public and private agents. In addition it includes all foreign diplomatic and consular agencies together with labour unions and various associations.

In view of the particularly substantial volume of activity undertaken by general government, an attempt is made in the accounts to distinguish among purposes of the activity. In this respect a distinction is made among :

- a) National Security
- b) Health
- c) General Education
- d) National Culture
- e) Basic Research
- f) Basic Public Work, and
- g) General Administration.

In view of the predominantly territorial nature of Egyptian Statistics, the accounts of the Rest of the World cover the transactions

undertaken by agents domestically located with other agents located abroad. By necessity these accounts exclude transactions undertaken by branches and affiliates of Egyptian agents located outside the national border.

As a matter of principle we recognize, for each of the above sectors, three basic types of activity undertaken by the economic agents grouped under it, giving rise accordingly to the possibility of constructing for each sector, a production account, an appropriation account and a capital account. In the case of the Rest of the World we have only a revenue and expenditure account.

RELATION OF NON-MONETARY TRANSACTIONS TO MONETARY TRANSACTIONS.

1. Despite the significance that subsistence transactions assume in certain branches of economic activities one may safely assume that they are of minor importance to the economy. In consequence, and as a whole, no attempt is made at separating them in the accounts. Whether looked upon from the view point of the effect that they may have upon current resources availed to the economy or their uses, such transactions are implicitly included as part of the estimates registered in the accounts. In what follows subsistence transactions are defined in the narrower sense, so as to include auto-supply, auto-consumption and auto-investment. They should not be taken to include transactions that take place within the village market. Excluded, also one transaction standing for imputed rents.

2. In dealing with the treatment of the subsistence transactions, within the frame of the Egyptian accounts, it is useful to distinguish among the following categories :



i) transactions involving real flows of goods and services:

a) auto consumption, and

auto investment

b) auto supply

ii) transactions involving primary factors of production.

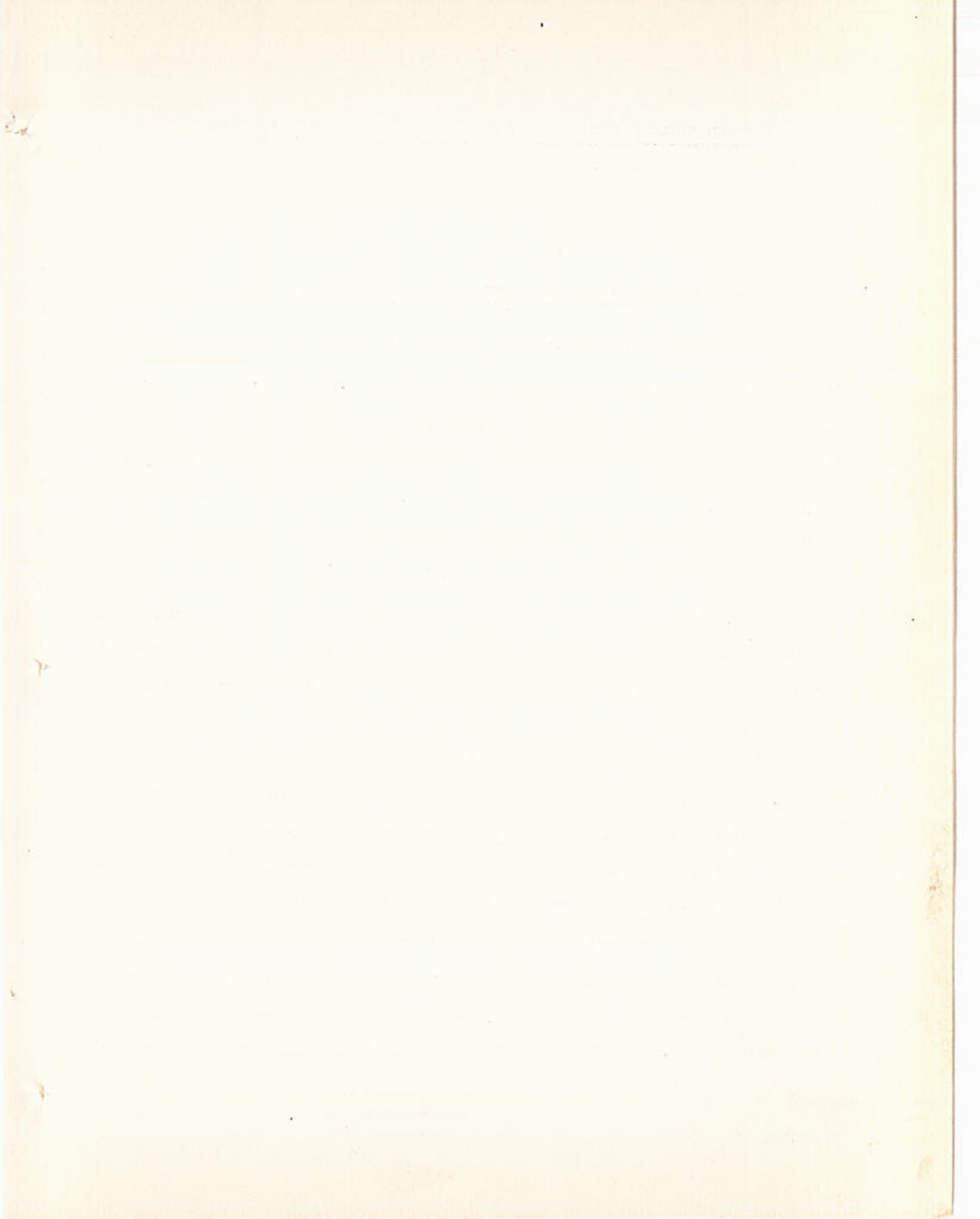
3. The transactions belonging to the first category assume some magnitude of importance in the agricultural sector. Indications are that transactions connected with auto consumption are of relative importance. In this respect the products most directly involved are Maize and Dairy products. They are estimated to involve at most some 10 - 12 % of total agricultural production.

Meanwhile there is a possibility that the production of certain types of animal food is connected with a certain amount of auto-supply. This is particularly true of Berseem. If by-products are taken into consideration, the importance of subsistence transactions connected with auto-supply are likely to increase in importance. Altogether, it is, perhaps, safe to assume that some 2-3 % of total production is involved in this capacity.

4. The second category of transactions involving primary factors of production is also important in agriculture. Under the prevailing extended family system unpaid family labour is supplied on a very extensive basis. It is estimated to amount to some 50 - 60 % of total labour requirements.

In the earlier accounts constructed for the period 1954-1958, no attempt was made at separating wages due for family labour. They were consequently added to income from property ownership. Recently this attitude has been reviewed. The latest estimates include them with the item of wages.

Francis.



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Manpower Planning for Future
Requirements.

1. This includes three stages.
 - a) Job description & Job Classifications.
 - b) Norms of production for
 - (i) the worker in different jobs.
 - (ii) a group of integral repetitive units on product or functional basis.

Importance of standards in planned economy.

2. Purpose
 - a) Job evaluation & incentive plans.
 - b) Manpower plans for the existing labor force or the future requirements in different economical sectors.
 - c) Better work methods dependant on simplification, modern techniques,
 - d) Training plans & specifically practical application.

A continious need for revision as the result of development, upgrading & changes.

3. Job Description & Job Classification.
 - a) Detailed & intensive efforts.
 - b) Coordination between similar jobs.
 - c) Determination of levels of skill & standards of performance.
 - d) Local characteristics of classification & job descriptions & titles, related to economic activities, social educational standards.
 - e) Agreement with all concerned.

4. Job Production Standards.
 - a) Quality, complexity & quantity.
 - b) Mehtods of estimation.
 - (i) Time study.
 - (ii) Methods time measurement (M.T.M.).
 - (iii) Past experience & records...... etc.
 - c) Importance of combining work simplification with production standards.
 - d) Priority for common & important jobs.

5. Group of Integral repetitive Units.
 - a) An all out enumeration of such units on product or functional basis considering factors affecting their relative priority.



- b) Breaking down function & operations to separate units & jobs of different specialities & standards.
- c) Determining job performance & analysing to trainable standard levels.
- d) Revision in the light of real application & improved methods as well as with other standards applied abroad.

Further References Required

1. Suitable experience of other countries, industries or activities in similar fields.
 2. Forms & procedures to encourage participation of all concerned. Programs for training certain specialists.
 3. Responsibility towards such obligations.
 - a) Ministry of Labour in conjunction with either industries, ministries, labour unions
 - b) Civil office administration with respective bodies of the Government.
 - c) Combination of all efforts to include manpower, equipment, facilities & methods.
-

The Problem of Lack of Instructors & Teachers in underdeveloped countries & How to overcome it?

(1) Need for instructors & teachers.

- A- Economical & industrial development.
- B- Expanded requirements for new trained personnel and for upgrading either within industry or in training institutions.
- C- Key role of instructors & teachers in training.

(2) Difficulties

- A- Economical, industrial and social lag.
- B- Lack of planning for providing the required number.
- C- Lack of training facilities and of qualified teachers.
- D- Two-sided abilities : knowledge of subject under study, and methods of teaching.
- E- Lack of interest in the teaching job.
 - 1. Personal interest.
 - 2. Complexity of the job.
 - 3. Pay-scale.

(3) Ways of Solution

A- Familiarization with resources.

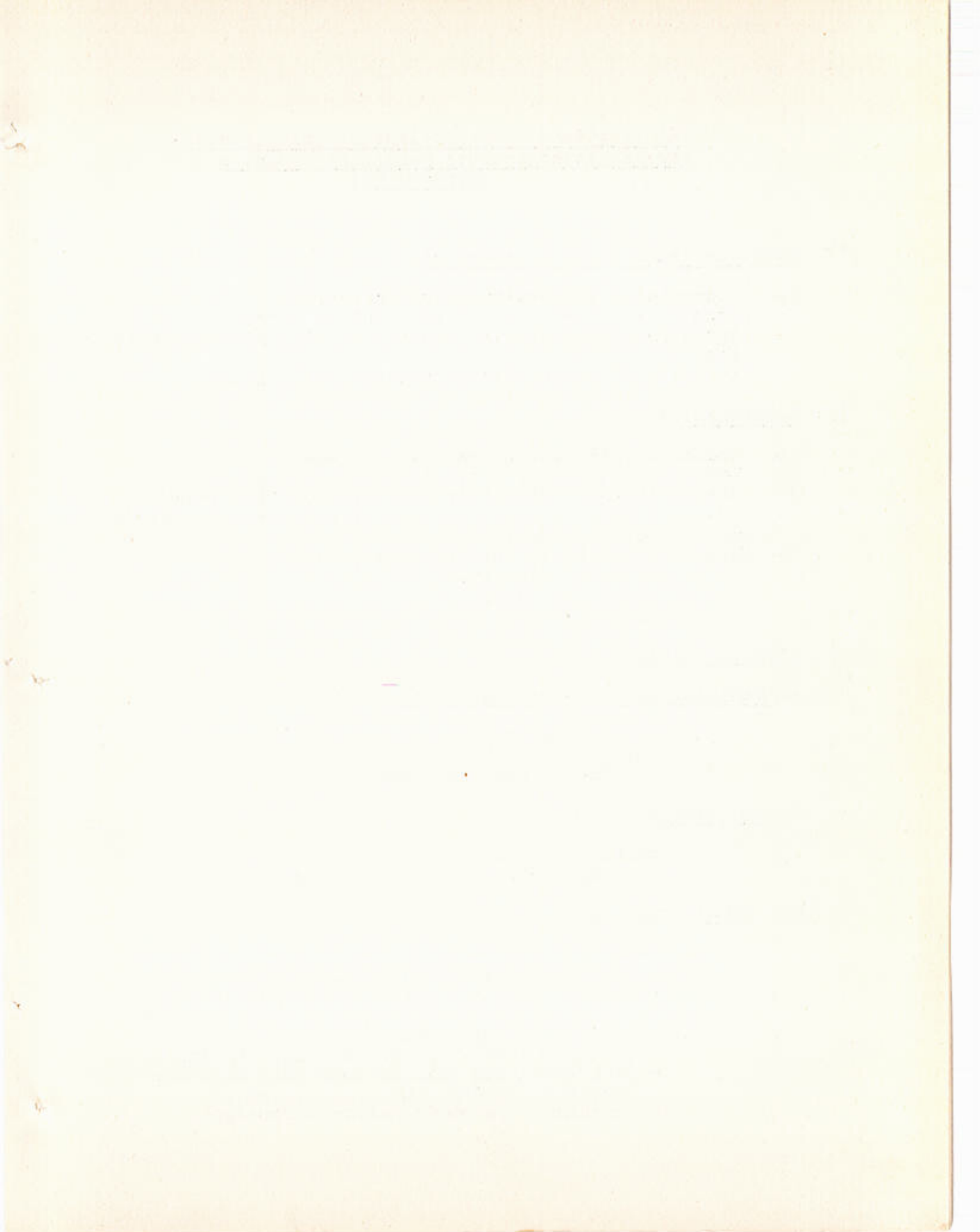
- 1. In teaching staff.
- 2. Who left service.
- 3. In industry and other work.

B- Motivation

- 1. Creation of interest.
- 2. Encouragement through better pay.

C- Local training

- 1. Planning
 - a- Objective training in different levels.
 - b- Organizing the program to provide :-
 - (1) Breaking down the job of the teacher's & instructor's work.
 - (2) More attention to teaching techniques.
 - c- Facilities and publications (all aids for teaching, lesson plans etc.)
 - d- Teaching personnel (native - foreign).



2. Execution
 - a- Upgrading of most suitable.
 - b- Initial training as new blood.

D- Missions

1. Urgency.
2. Coping with foreign techniques.
3. Adaptation to local conditions.

E- Employment of experts

1. Experts to aid in instruction.
2. Experts in preparation of instructors (the difficulties of language).



What are the most suitable systems for developing countries in the field of training skilled workers ?

1. Apprenticeship.
 2. Industrial Schools.
 3. Training Within Industry.
 4. Productive Training Centres connected to industry.
-

(I) Apprenticeship
Advantages :

- a- Guaranteed employment.
- b- Realism.
- c- Low cost of actual training.

Disadvantages:

- a- Long period of training.
- b- Lack of training ability and appreciation among instructor workers or supervisors however skilled.
- c- Inability of training on new specialities not existing in industry.
- d- Contradiction between training plans and production plans, either in imparting main skills or due to the pressure of production.

(2) Industrial Schools
Disadvantages:

- a- Difference between equipment and techniques used in training and those used in industry.
- b- Lack of realism and benefit from coordination with industry, the schools being so isolated from it.
- c- Incompliance with standards of time ratings in practical training.
- d- Reliance upon non-productive exercises in practical training.
- e- Lack of up-to-date knowledge of modern techniques of industry among instructors.
- f- Vague future for the students & consequently too wide specialities.
- g- High cost.

Advantages:

Better standard and higher ability to work among graduates as compared to graduates of general education secondary schools without further training.



(3) Training Within Industry

Advantages :

- a- Utilization of capabilities of industry in training narrow specialities.
- b- Suitability for upgrading of present workers.

Disadvantages:

Cannot fulfil the new demands of higher skills.

(4) Productive Training Centres Connected to Industry

Advantages :

- a- Presence of productive element, represented in period of productive training carried out in industrial establishment under supervision and guidance of centre instructors, hence compliance with modern techniques of industry.
- b- Higher percentage of productivity of practical training inside center and consequently higher degree of economy.
- c- Ability of training in new fields of industry.
- d- Possibility of perfecting training on elementary and main skills with the most suitable methods nonexistent in actual industry.
- e- Combination of advantages of apprenticeship, namely realism, and those of schools, namely training atmosphere.

Disadvantages:

Higher initial cost of establishing such centres.

Elements of Training & Their
effect on its success.

Elements of Training

1. Students.
 2. Objective.
 3. Facilities.
 4. Publications.
 5. Instructors.
 6. Techniques & Methods.
 7. Management & Control.
-

(I) The Students

- A- Social, ideological & biological background.
 1. Interest (natural - incentive - hobbies).
 2. Regard of labour jobs as minor.
 3. Aptitudes (physical - mental - manual).
- B- Cultural & Educational backgrounds.
- C- Selection.
 1. Personnel requirements.
 2. Interest & ability to profit by instruction.
 3. Mental & physical job requirements.
 4. Guidance & utilization of drop-outs.

(2) Objective

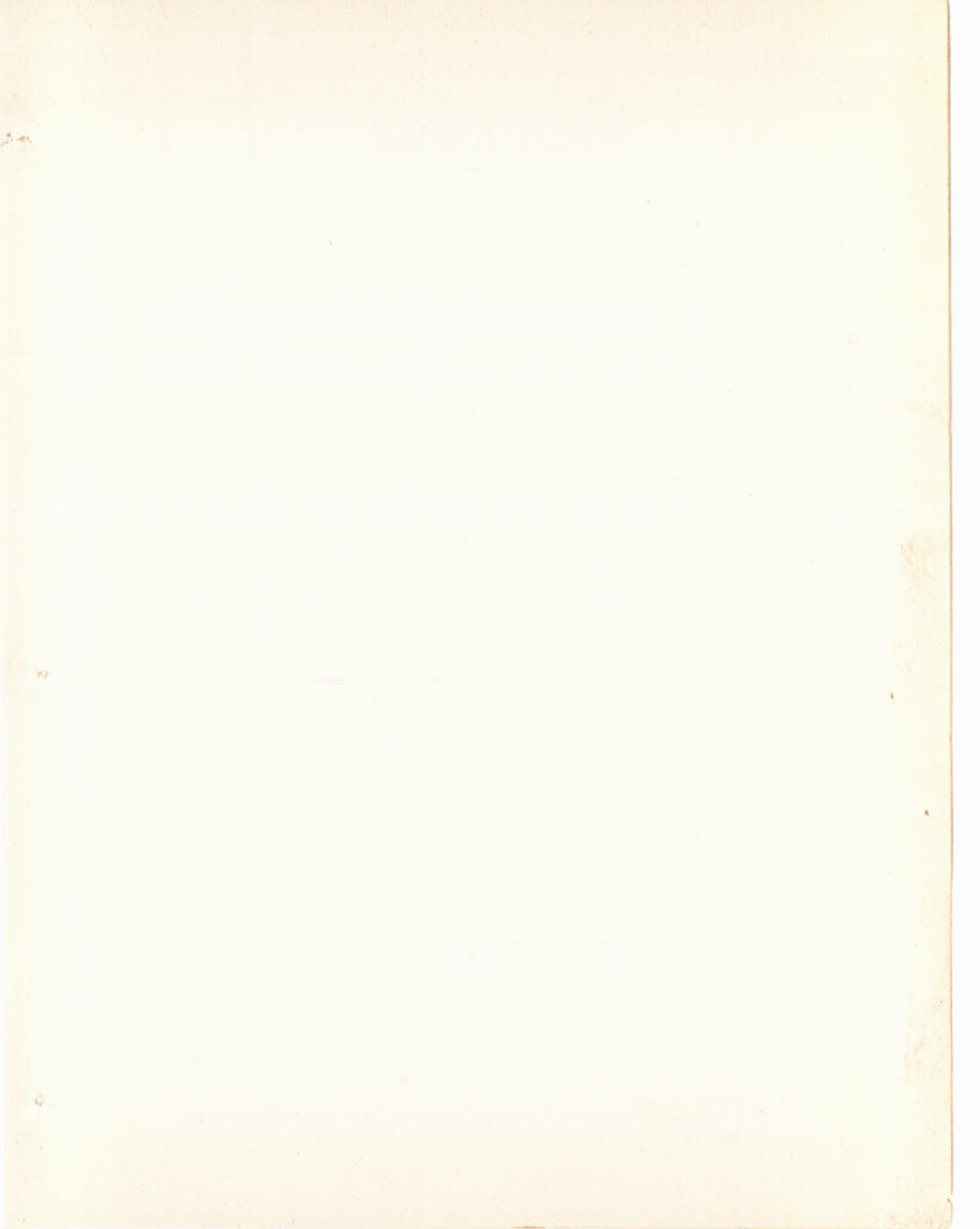
- A- Level desired (job description ... etc.)
- B- Training plan & programs.
- C- Possibility of advancement & upgrading.

(3) Facilities

- A- Site & Premises.
- B- Classrooms, Laboratories, Workshops within training establishments & on the job.
- C- Training aids.
- D- Equipment & Materials.

(4) Publications

- A- References, text books, lesson plans, & master plans.
- B- Technical terms & their unification.
- C- Summaries.
- D- Drawings & Charts (instructional & technological).
- E- Libraries.



(5) Instructors

- A- Social & Biological Background.
 - 1. Interest (natural - incentive)
 - 2. Aptitudes (physical - mental - manual).
 - 3. Personality.
- B- Cultural & Educational Background.
 - 1. Theoretical.
 - 2. Practical.
 - 3. Pedagogical

(6) Techniques & Methods.

- A- System (Apprenticeship, full day school, night schools, correspondance, on the job productive training centres.
- B- Technique (Curriculum Exmaination etc.).
- C- Methods of presentation (lecture, conference demonstration).
- D- Collaboration of industry & other economical sectors.

(7) Management & Control

- A- Organization.
- B- Discipline.
- C- Supervision.
- D- Social activities & welfare.
- E- Exchange of information & experience.

Emphasis

- 1. Instructors.
- 2. Equipment.
- 3. Publications.

