The Concept and the Process of Planning in the German Democratic Republic by Hans Schilar

Central Institute of Economics
Academy of Sciences of the German Democratic Republic

The views expressed in this document, the selection of facts presented and the opinions stated with regard to those facts are the responsibility of the author and do not necessarily reflect the views of Unesco.
PREFACE

This study was undertaken under the framework of the programme action "Development of appropriate planning methods for devising and implementing integrated development policies" of the approved Programme and Budget for 1984-85, under sub-programme VIII.1.4, "Development Planning and Evaluation" and the Major Programme VIII, "Principles, Methods and Strategies of action for development" of the Second Medium-Term Plan (1984-89) of Unesco.

The author, Mr. Hans Schilar traces how the concept and the process of planning in the German Democratic Republic has evolved since the 60's. He has analyzed how the planning, management, stimulation and encouragement and economic accounting have been adjusted and changed to ensure a more effective functioning of the economic system.

The paper is divided into five sections. The first section deals with the socio-theoretical foundations of the concept of planning, as understood and practised in the German Democratic Republic. Section 2 describes the functional operation of planning on the basis of economic planning. In this connection special attention is devoted to the planning of the living standard as the central task of economic planning. Section 3 provides an analysis and evaluation of important developmental processes of the planned economy observable over the last two decades. Part 4 gives a description of the results obtained in the wake of the economic development of the country in the period from 1970 to 1983. Part 5 discusses fundamental trends
in the further development of the system of management, planning and economic accountancy in the 80's which were decided upon in 1983. In conclusion, the paper discusses several old and new problems in planning which awaits research and solution.
<table>
<thead>
<tr>
<th>Contents</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Philosophical and economic assumptions</td>
<td>1</td>
</tr>
<tr>
<td>1. Planning in the German Democratic Republic</td>
<td>4</td>
</tr>
<tr>
<td>(Case study: economic planning)</td>
<td></td>
</tr>
<tr>
<td>2.1. The system of planning</td>
<td>4</td>
</tr>
<tr>
<td>2.2. The system of balancing</td>
<td>6</td>
</tr>
<tr>
<td>2.3. Management and organisational structure of the economy</td>
<td>7</td>
</tr>
<tr>
<td>2.4. Algorithm of annual planning</td>
<td>10</td>
</tr>
<tr>
<td>2.5. Planning of living standard</td>
<td>14</td>
</tr>
<tr>
<td>3. Development and developmental problems of GDR planned economy (an</td>
<td>20</td>
</tr>
<tr>
<td>analysis of measures in practice)</td>
<td></td>
</tr>
<tr>
<td>3.1. Economic reform of the 60's</td>
<td>22</td>
</tr>
<tr>
<td>3.2. Measures in the 70's</td>
<td>27</td>
</tr>
<tr>
<td>4. Results of economic development of the GDR</td>
<td>32</td>
</tr>
<tr>
<td>5. Directions of further development of the economic mechanism in the</td>
<td>37</td>
</tr>
<tr>
<td>80's</td>
<td></td>
</tr>
<tr>
<td>6. Several problems in the discussions on planning</td>
<td>41</td>
</tr>
<tr>
<td>Literature</td>
<td>46</td>
</tr>
</tbody>
</table>
The Concept and the Process of Planning in the German Democratic Republic

by Hans Schilar

1. Philosophical and economic assumptions

Planning as the well-founded foresight into future social development is the most essential aspect and requirement for socialist societies. This results from the nature of social ownership in the means of production, the reproduction of which can be secured only by resorting to planning on a nation-wide scale. Historically, a new quality of planning has emerged with the formation of social ownership.

In the working process man has always become active in a planned manner. In the past epochs his actions were related only to the immediate object of activity. The development of productive forces led to the emergence and deepening of the social division of labour and to the socialization of production and labour. This process also led to a partition of intellectual and physical work, including the detachment of the planning functions from the direct process of manufacture. The processes of industrialization in the 19th century and the processes of concentration in the 20th century (formation of monopolies), as brought about on the basis of private capitalist ownership, did not only enhance the importance of enterprise planning, but also advanced and increasingly reasserted the need for social planning. This has become especially obvious since the emergence of state monopoly capitalism. The attempts at social planning and programming have been an expression of it.

Social ownership in several countries generally created on the basis of social revolutions, as evidenced in this century, is linked up to the formation of social planning functions.
The detachment of planning from the immediate working process, in which it once played the role of an element for organization and function, and the achievement of relative independence was the outcome and the progress of division of labour, with great importance being attached to it. This created the preconditions for overcoming practicalism and subjectivism and, accordingly, for making a scientific approach to planning.

This process has been further advanced with the formation of social ownership. Enterprise or institutional planning is embedded in a more comprehensive planning process. However, this is entirely possible only on the basis of socialist social ownership, because planning can and has to be elevated to the basic function of societal management by the State and its institutions. Planning as a social process of management and coordination is predicated on the social theory, implying that man himself makes history, yet not at all voluntarily, but under definite conditions. In line with this concept it is that working people are primarily the subject of planning and they have their centre of control and leadership in the State apparatus. Marxism provided the scientific concept for the planned development of society. Participation in planning belongs to the essential activities of all working people.

The need for social planning can be conceived only in the way that the major processes of social development, i.e. those influencing the total system, are subject to central planning and management. In each case this applies to the basic questions of social-, economic-, educational-, health-, infrastructural-, environmental-, science- and cultural policies, etc. Socialist social ownership - and this appears to be the decisive feature - is indivisible.
However, social division of labour necessitates the use and multiplication of property in social and economic sub-systems (institutions, facilities, enterprises etc.). Therefore, social property can be effectively put into reality only when the carriers of the subsystems together with the right to use conferred on them assume also the responsibility for the functioning of all operations relating to the work process. Within this context of social ownership that is indivisible in principle and the social division of labour that requires the utilization and multiplication of property in social and economic subsystems, there is the central state planning combined with inherent responsibility in social and economic subsystems which is derived from this combination. The term "democratic centralism" is based on this correlation.

The implementation of democratic centralism in society and economy has always been a historically concrete task, which means that the requirements for the level of development of the productive forces and the production relations are determined by a definite quality of combination between central state planning and inherently responsible activities. The historical experience gained by the socialist countries has shown that a successful construction has been essentially dependent upon the shaping of this correlation.

Planning as the well-founded foresight into future social development proceeds from the existence of social and economic laws and is based on their intentional utilization. An essential feature of the Marxist concept of society is the recognition of objective laws on the development of society and the possibility of their cognition and utilization. Planning is accordingly linked to the scientific process of cognition relating to the content
and the requirements for utilizing social and economic laws. At the same time the nature of social laws determines the content of the planning process.
Planning is a process to draw up possible (admissible) variants of development, to evaluate and to determine the most propitious (optimum) version. This requires a sufficient amount of knowledge on the conditions existing, on the possibilities (material and personnel resources) as well as on the goals of social and economic development. The increase in the material and cultural living standard of the population is the fundamental and general criterion of this goal. The fact that the development of needs shows great dynamics and that the capacities and resources available are insufficient to satisfy all needs is coupled with decision-making situations on consumption and production, being in the centre of central state planning.
The plan is the result of planning and its underlying decision. The plan is the document binding on the social and economic development over a definite period. The plan encompasses the goals and tasks together with the means and measures required for implementing the targets. The plan has the character of a directive.

2. Planning in the German Democratic Republic
   (Case study: economic planning)

2.1. The System of Planning

The integrated expression of all planning processes is the system of planning. It includes

- the structure, functions and interaction of the planning and balancing organs at all levels and in all spheres. At central
level the State Planning Commission is the planning organ of the Council of Ministers which on behalf of the People's Chamber, the supreme organ of State power, is responsible for the management of the national economy. On the level of branches and territories the ministries together with the district-, county- and town planning commissions are responsible for the planning process. On the level of economic units (enterprises, combines, institutions, unions, etc.) the planning departments serve as planning organs; - the system of plans; - the management and organization of the preparation, elaboration, implementation and control of plans including the decisions taken and the international coordination of national economic plans within the framework of CMEA; - the methods, processes, instruments and the information system of planning.

The planning of the national economy is the centrepiece in the system of planning. It comprises the reproduction process of the entire economy and thus the social, economic, scientific-technical and cultural development of all branches, territories and regions. Central State planning provides the decisive basis for economic management and, in coordination with the planning in combines, enterprises and territories, it secures the proportional development of economy.

The planning of the national economy, from the point of view of the time horizon, encompasses the analytical-prognostic activities, long-term planning, five-year planning and annual planning. The major direction of analytical-prognostic activities is aimed at making the preparations for the five-year plan and ensuring a scientific approach to the scientific-technical pro-
gress in particular, to developing the structure of production
and to the distribution of the productive forces and to socialist
economic integration (CMEA). Five-year planning is concentrated
on the major processes of scientific-technical progress, the
formation of a production and export structure, the development
of the material and cultural living standard (housing programme,
consumer goods production), on a safe and stable supply of the
economy with energy, raw materials and other resources and on
international economic cooperation. Annual planning is aimed at
implementing the tasks and goals of the five-year plan, with the
annual economic plans not only specifying the tasks of the five-
year plan, but even breaking them down in line with a change in
conditions and requirements.

2.2. The System of balancing
Balancing is the major method for planning the national economy.
Balancing makes it possible to establish relations of equilibrium
and proportionality. In the GDR different types of balances
are used:

a) Balances of the total national economic account
They primarily include the following:
- The balance of the gross social product and national income;
- Foreign trade and payments balances
- Balance of the commodity fund, monetary receipts and ex-
  penses and the real income of the population;
- Financial balance of the State, the balance-sheet of the
  State budget and the crediting system;
- Balance of the population and working people;
- Balance of fixed assets and investments.
b) **Value balances and input-output tables**
They are instruments for central state planning relating to analysis and coordination of the plan indicators.

c) **Balances of products and building performances**
They include the balance-sheet of materials, equipment and consumer goods. They are drawn up for five-year planning (about 375 balances) as well as for annual planning (about 4500 balances). They are used to centrally balance and confirm:
- about 76 percent of industrial commodity production
- about 87 percent of exports and imports
- about 80 percent of the supplies for the population.

In line with the structure of management the system of balancing is built like a pyramid. The balances are broken down into:
- 440 balances to be confirmed by the Council of Ministers
- 670 balances to be confirmed by the State Planning Commission
- 1030 balances of combines to be approved of by the competent ministry;
- 2360 enterprise balances to be approved of by the combine.

2.3. **Management and organisational structure of the economy**
The combine is the basic economic unit in industry, building, transport and communication of the GDR. At present there are 153 centrally run combines in these fields of production. In addition there are 93 industrial combines as well as a number of building combines and grain-, milk- and meat combines as well as combines in the service sector subordinate to the district councils (the GDR is subdivided into 15 districts and 219 counties). The combines have been established after a long period of searching for and testing a more suitable system of economy and management.
This process began in 1966/67 and was concluded in 1981/82 with their establishment. The formation of combines proceeded in consideration of the objective requirements for the concentration and centralization of production and funds as well as for the dynamics of the scientific-technical progress. At the same time effective structures of management had to be created.

The formation of combines has been predicated on the idea to integrate all processes and stages interrelated within the cycle of an economic subsystem under a uniform management. Above all this applies to the closer integration of science and production as well as to a more effective organization of foreign trade activities.

Thus, in the wake of the formation of combines, a considerable potential of research and development cadres who were so far employed in separate institutions was incorporated into the combines and immediately coupled with production. Some 71,500 cadres concerned with the construction and design of the means for rationalization were also integrated in the combines.

In conjunction with the formation of combines Foreign Trade Enterprises were established that deal with foreign trade business within the framework of the combines, or in favour of the combines. Since foreign trade and foreign exchange in the GDR are a State monopoly, the Foreign Trade Enterprises are doubly subordinated. Presently, 85 combines have Foreign Trade Enterprises or business firms which have been assigned to them, 24 of them are immediately subordinated to definite combines.

As a result, the combines are in a position to evolve their own business activities for handling exports and imports.
A substantive change of the structure of economy was brought about as a result of the formation of combines. This structural change was also related to a concentration of production. In the period from 1956 to 1983 the number of industrial enterprises was reduced from 18,344 to 3,836. It was symptomatic of this process that the share of enterprises having up to 500 employees receded considerably, whereas the share of enterprises with more than 500 employees increased sharply.

If the number of workers and employees, net industrial production and the number of enterprises is related to each other, the following figures are obtained for the period 1956 to 1983: While the number of enterprises was cut back to about 7/5, net production increased by 4.6 fold with an increase in the number of working people by about 25%. Thus the average volume of net production of an industrial enterprise was increased 25-fold over this period.

The combine comprises all those enterprises that belong to a certain line of production, or contribute essentially towards implementing production. For instance, the Combine Petrochemie Solvay encompasses only 4 enterprises, whereas the Combine 'Cotton' includes more than a hundred firms. The enterprises belonging to the Combine remain economically independent entities and corporate bodies bearing their own names with reference to the Combine. They are run on the basis of economic accountancy and they are held fully responsible for the fulfilment of the State plans, the targets and indicators of which have been broken down by the Combine on the various enterprises.

The Combines enable a more effective organisational structure of planning and management. The management structure is uniform
and thus simplified. The Combines are immediately subordinated to the corresponding ministries and accordingly the General Directors of the Combines to the Ministers. As a result, a two-level system of management was generally put through. Any branch connections that existed up to the beginning of the 80's between the ministries and the enterprises were removed. In conjunction with their removal the functions required for the administrative management and the economic management were united, with superfluous functions being liquidated. The management of the Combine is effected by the parent enterprise which, as a rule, is the biggest and most efficient enterprise of the Combine.

Agriculture was also characterized by a considerable process of concentration and specialization, resulting in new forms of organization for planning and management. Thus specialization in the major lines of production led to the establishment of specialized enterprises for crop and animal production, agro-industrial combinations and to the emergence of cooperation unions designed for the production of cattle, dairy farming, etc.

2.4. Algorithm of Annual Planning

Annual planning is done in the following steps and stages:

1. Preparation for plan

The plan preparation draws on a thorough analysis of past economic processes and takes account of prognostic assessments on future developments. Plan preparation is orientated towards the development concepts, with the evaluation of the demand for capital and consumer goods and scientific-technical innova-
tions assuming a decisive role. During the phase of plan preparation it is that the requirements and the possibilities of the economic development are revealed for the year in consideration.

2. **Initial stage of plan**

The initial stage of plan is the rough project for the annual plan to be established. It is drawn up at a central level by the State Planning Commission. The initial plan serves as the point of departure for the concept of planning comprising all the links and levels of the economy. It encompasses the general fixation of the structure of the emerging annual plan and has a provisional character still in many aspects. It contains the basic issues underlying further planning and determining their content.

3. **The State plan tasks**

The State plan tasks are indicators to be derived from the initial plan and to be confirmed by the Council of Ministers. They comprise the tasks determining the national economic proportions. The State plan tasks are submitted to the ministries, the combines, the territorial organs (districts, counties, towns, boroughs), the cooperatives and institutions in the form of plan indicators, calculation indicators, normatives, directives and balancing variables. The plan drafts are worked out on this basis.

4. **Plan discussion and plan draft**

In the course of the plan discussion the working people get acquainted with the national economic goals and tasks and submit proposals on how to implement them. At the same time initiatives
are taken to exceed the plan targets. In this connection the trade unions play an active role. The plan discussion is the major platform for the participation of the working people in the drawing up of plan. During the plan discussion the combines and the enterprises coordinate their designs with the subsuppliers and the buyers of their products as well as with the territorial organs.

The draft of the plan emerges as a result of the plan discussion and the reciprocal coordinations of the plan. The draft plans encompass the material and financial tasks of the scientific and technical development, the investment activities, rationalisation, working and living conditions, production and sales. Purchase of material, sales of products and carrying out of investments are prepared by economic contracts. The economic contract serves as an important link in the plans of combines, enterprises, cooperatives and institutions.

5. The vindication and coordination of draft plans

The draft plans shall be defended before a superordinate management organ (enterprise - combine - ministry - State Planning Commission). In the wake of the vindications of plans it becomes obvious whether and to what extent the draft plans contain effective solutions and are coordinated. Vindications of plans are an instrument to draw up optimum draft plans. Coordination applies above all to the following fields:

a) the coordination of the draft plans between the economic units, institutions and territorial organs;

b) the coordination of the draft plans with important economic balances (material balances, equipment balances, consumer-goods
balances, investment balances, foreign-economy balances); c) the coordination of national projects with international requirements and possibilities (cooperation and specialization, participation in investments, foreign-trade activities). The economic consultations at the highest level of CMEA held in Moscow from June 12 to 14, 1984, emphatically stressed the importance of this type of coordination. They demanded that the principle to achieve a coordination of plans to be concluded between the CMEA-countries shall be continuously observed prior to the beginning of the new plan period.

After coordination, the draft plans are drawn up by the ministries and integrated into one plan and submitted to the State Planning Commission. On this basis the State Planning Commission prepares the draft of the National Economic Plan and the State Budget Plan and hands them over to the Council of Ministers. After approval by the Council of Ministers these drafts are handed over to the People's Chamber, where the National Economic Plan and the State Budget Plan are adopted.

6. The State plan requirements
The State plan requirements are derived from the documents of the plan thus passed, they are made to a binding rule and are broken down on the economic units and territories. The State plan requirements are final and binding State plan tasks. They have the character of a directive.

7. The implementation of plan
The plans of combines, enterprises and institutions are subdivided according to departments, sections and brigades. The implementation of the plan makes it indispensable to specify and concretize
the plan for every day, week and month. Operative management is aimed at organizing the implementation of plan under the actually existing and changing conditions. Unpredictable changes can lead to the fact that modifications of the plan will be necessary.

8. Accounting and control
There is a steady accounting and control on the level of plan fulfilment.

2.5. Planning of living standard
To raise the living standard is the goal of social and economic development. This involves as the foremost requirement the strengthening of the State and the achievement of a high political stability with a view to actively contributing towards the preservation of peace. The policy of full employment is the decisive centerpiece of socialist economic and social policies based on the constitutionally guaranteed right to work.

As a result, the living standard is the focus of national economic planning and is the determining input variable. Accordingly, the crucial question of planning is to analyze the tendencies underlying the development of needs and necessities and, proceeding from the production potentials (capacities, resources) and from the political, social and economic requirements to define the priorities for the satisfaction of needs. Structural decisions on effectiveness of production are deduced from the preferences.

The living standard mainly implies the following aspects:
- Working conditions (work-time, vacation, regime of work, labour safety, industrial hygiene, environment and work organization, catering in the enterprise);
- Effects of environment on man (forest, water, architecture, infrastructure, etc.);
Consumption (material and cultural products and services);
Free time (spending of leisure time, etc.).
The planning of the living standard makes it necessary to devise and use an adequate system of indicators. This system encompasses primarily the consumption and equipment indicators, the service indicators, the indicators for the material and temporal working conditions, the use of free time, etc. The representative surveys and data collected on the economic accounting of budgets provide the major statistical basis for it. Another source of information is provided by the inquiries on family income as well as by polls on the inventory of durable consumer goods in households together with time-budget studies.

It is a complex and difficult task to formulate the concrete goals for raising the living standard. In this context the question is to assess the urgency and thus the priorities in the satisfaction of needs within a definite period of development. Since 1971 the social policies of the GDR have above all been characterized by the housing programme, suggesting a social solution to the housing question by 1990. In carrying out this goal it is important to view social policies as a unit with economic policies, finding its expression in planning.

The development of consumption having an essential impact on the living standard is correlated with the development of accumulation, particularly with investments, and the effects of both are reflected in an increase in consumption in future. For this reason, the decision on how to use the national income, either as funds for consumption or accumulation, is therefore a policy decision, determining the entire process of planning.
The following survey illustrates the development of important national economic indicators and their structure (see Table 1). Since the middle of the 70's the shares in the national income have markedly changed in favour of consumption. This was primarily attributable to the fact that it was possible to increase the effectiveness of investments and to lower the expenditure for materials.

An important peculiarity is that in planning the consumption the funding of consumer goods is done from two sources. The most important source is that there are the receipts (wages, salaries) from work done. Second, there are the receipts from the social funds that are used by the households free-of-charge and influence the total income (real income). Therefore consumption is divided into an individually funded portion and a socially funded portion. The development of the shares is shown in Table 2.

The planning and use of the wage fund is done on the basis of the State wage policy, with its most important aspect being a performance-conformable pay. The amount of wages is determined by the valid scales (they have been prepared for the entire economy), the qualification and the work performance.

The development of the average wage of workers and employees, as a State plan indicator, is based on five-year planning. This indicator takes account of the changes in the occupational structure as well as of the envisaged increase in the level of qualification, it also considers the recognition of higher work performances and new claims put forth on account of valid labour law regulations. For annual planning the State plan indicator of the wage funds is given in absolute terms. The relationship
<table>
<thead>
<tr>
<th>Year</th>
<th>Gross social product</th>
<th>Produced national income</th>
<th>National income used in the country</th>
<th>Investments (total)</th>
<th>Capital assets in production</th>
<th>Working people in producing fields 1000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mark Mio(^1)/</td>
<td>Mark Mio(^1)/</td>
<td>Total Accumulation Consumption</td>
<td>Mark Mio(^1)/</td>
<td>Mark Mio(^1)/</td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>333.6</td>
<td>117.4</td>
<td>100 25.6 74.4</td>
<td>36.4</td>
<td>370.7</td>
<td>7769 6414</td>
</tr>
<tr>
<td>1971</td>
<td>350.1</td>
<td>122.6</td>
<td>100 24.3 75.7</td>
<td>36.9</td>
<td>392.9</td>
<td>7795 6407</td>
</tr>
<tr>
<td>1975</td>
<td>438.8</td>
<td>152.8</td>
<td>100 23.4 76.6</td>
<td>46.0</td>
<td>493.7</td>
<td>7948 6434</td>
</tr>
<tr>
<td>1976</td>
<td>459.9</td>
<td>158.1</td>
<td>100 24.2 75.8</td>
<td>49.4</td>
<td>522.3</td>
<td>8018 6470</td>
</tr>
<tr>
<td>1977</td>
<td>481.2</td>
<td>166.0</td>
<td>100 24.3 75.7</td>
<td>52.2</td>
<td>550.7</td>
<td>8058 6484</td>
</tr>
<tr>
<td>1978</td>
<td>501.3</td>
<td>172.2</td>
<td>100 22.7 77.3</td>
<td>53.6</td>
<td>560.2</td>
<td>8118 6518</td>
</tr>
<tr>
<td>1979</td>
<td>520.3</td>
<td>179.2</td>
<td>100 21.3 78.7</td>
<td>54.4</td>
<td>608.9</td>
<td>8184 6551</td>
</tr>
<tr>
<td>1980</td>
<td>541.8</td>
<td>187.1</td>
<td>100 22.7 77.3</td>
<td>54.5</td>
<td>644.4</td>
<td>8225 6574</td>
</tr>
<tr>
<td>1981</td>
<td>561.9</td>
<td>196.1</td>
<td>100 21.7 78.3</td>
<td>56.0</td>
<td>679.7</td>
<td>8296 6614</td>
</tr>
<tr>
<td>1982</td>
<td>563.8</td>
<td>201.1</td>
<td>100 18.0 82.0</td>
<td>53.1</td>
<td>717.4</td>
<td>8368 6651</td>
</tr>
<tr>
<td>1983(^x)/</td>
<td>578.7</td>
<td>210.1</td>
<td>100 17.6 82.4</td>
<td>53.1</td>
<td>754.0</td>
<td>8445 6696</td>
</tr>
</tbody>
</table>

\(^x/\) Provisional figures

\(^1/\) Comparable prices (basis of 1980)

Source: Statistical Year-Book of the GDR 1984, p. 13, 14, 15, 16, 17, 100.
<table>
<thead>
<tr>
<th>Year</th>
<th>Used national income</th>
<th>Consumption</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>Individual consumption</td>
<td>Social consumption</td>
</tr>
<tr>
<td>1970</td>
<td>100</td>
<td>74.4</td>
<td>63.5</td>
<td>10.9</td>
</tr>
<tr>
<td>1971</td>
<td>100</td>
<td>75.7</td>
<td>64.1</td>
<td>11.6</td>
</tr>
<tr>
<td>1975</td>
<td>100</td>
<td>76.6</td>
<td>63.9</td>
<td>12.7</td>
</tr>
<tr>
<td>1976</td>
<td>100</td>
<td>75.8</td>
<td>62.9</td>
<td>12.9</td>
</tr>
<tr>
<td>1977</td>
<td>100</td>
<td>75.7</td>
<td>62.6</td>
<td>13.1</td>
</tr>
<tr>
<td>1978</td>
<td>100</td>
<td>77.3</td>
<td>64.0</td>
<td>13.3</td>
</tr>
<tr>
<td>1979</td>
<td>100</td>
<td>78.7</td>
<td>65.6</td>
<td>13.1</td>
</tr>
<tr>
<td>1980</td>
<td>100</td>
<td>77.3</td>
<td>64.9</td>
<td>12.4</td>
</tr>
<tr>
<td>1981</td>
<td>100</td>
<td>78.3</td>
<td>65.7</td>
<td>12.5</td>
</tr>
<tr>
<td>1982</td>
<td>100</td>
<td>82.0</td>
<td>69.0</td>
<td>13.0</td>
</tr>
<tr>
<td>1983</td>
<td>100</td>
<td>82.4</td>
<td>69.7</td>
<td>12.7</td>
</tr>
</tbody>
</table>

Source: Statistical Year-Book of the GDR 1984, p. 100
between an increase in labour productivity and the average wage is considered the criterion for planning the wage fund. The essential kinds of wages used are the basic wage rates and the performance-dependent wage rate. Both kinds are aimed at consolidating the productivity-promoting function of income. In the GDR the following regulations are to be applied to the use of the wage fund:

- The planned wage fund can be fully claimed by the enterprise if labour productivity is increased, as planned, and planned production is fulfilled on the basis of the planned number of workers. In the event of deviations a decision has to be taken on the utilisation of the wage fund.

- The wage of the worker is oriented towards his performance made. Overruns of the permitted wage fund attributable to an insufficient activity of enterprise entail a cutback in bonuses to the managerial staff.

- Enterprises, after every three months, are required to be accountable to their bank on how the wage fund was utilized depending upon the performances achieved. The bank is entitled to take influence on the utilisation of funds.

The planning of funds for social consumption is done in connection with the drawing up of plans for the State budget. Important items on the use of the State Budget and the social funds are shown in Table 2. The subsidies made for ensuring low and stable prices of those commodities belonging to the basic needs of the population (bread, potatoes, cereals, coal, children's textiles, transport tariffs, etc.) are a characteristic aspect of the price policies pursued in relation to consumer goods. This applies also to rents.
The planning of those social sectors financed by the State budget is done on the basis of capacity and consumer indicators which are subject to persistent development in line with the requirements and possibilities. This applies to index figures on frequencies in children's crèches, kindergarten, schools and universities as well as to normative figures for cultural institutions and public health service.

3. Development and developmental problems of GDR planned economy (Analysis of measures in practice)

The construction of an effectively functioning planned economy is a complicated task. The dynamics of social and economic development prompted primarily by scientific-technical progress is coupled with permanent changes proceeding in the economy, and planning has to be geared to them. Therefore, the planning system is subject to continuous surveys on whether or not it takes due account of the conditions available and the planning process is effectively organized. For this purpose no valid solutions are available for all the stages of development. However, the general requirements are invariably equal over all the periods: Planning has to function in a way that in maintaining the social interests a considerable conformity of interests will be reached between all those involved in planning and plan implementation. At the same time there has to be an accommodation of interests to be linked up with a high effectiveness of production. This makes it indispensable to use suitable forms and methods of rational planning and a rational running of the economy. The principles which are used to evaluate the performance of an enterprise, a collective and a worker are of particular importance in this respect.
<table>
<thead>
<tr>
<th>Year</th>
<th>Expenditures from State budget for</th>
<th>Benefits for the population from the social funds</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Education (including higher and university education)</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>Culture (including service and social care)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Health (without old-age pensions)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social security</td>
<td></td>
</tr>
<tr>
<td>1971</td>
<td>6369</td>
<td>1202</td>
</tr>
<tr>
<td>1975</td>
<td>8276</td>
<td>1953</td>
</tr>
<tr>
<td>1980</td>
<td>9836</td>
<td>2287</td>
</tr>
<tr>
<td>1981</td>
<td>10605</td>
<td>2428</td>
</tr>
<tr>
<td>1982</td>
<td>10959</td>
<td>2484</td>
</tr>
<tr>
<td>1983</td>
<td>11119</td>
<td>2540</td>
</tr>
</tbody>
</table>

Source: Statistical Year Book of the GDR 1984, p. 51.
The following principles underlying the formation and functioning of the planning system were and are still in the focus of development:

- **Democratic centralism**
  (Connection between central State management and planning and inherently responsible activity in social and economic subsystems);

- **Principle of work performance**
  (It is based on the principle of material interest and finds its most important reflection in the pay according to work performance);

- **Unity of material and financial value-oriented planning**
  (This principle is based on the historically grown knowledge that the planning objects of socialist production are the unity of use-value and value as such).

3.1. **Economic reform of the 60's**

At the beginning of the 60's the conditions had emerged for a new phase of development in the GDR. **On the one hand**, substantive tasks had been fulfilled in creating a stable material and technical basis of economy. Caused by war damages and the division of Germany certain industries, or branches of industries had either to be newly erected (such as metallurgy and shipbuilding), or to be expanded (mechanical engineering, chemistry, electrical industry). In addition, new branches were in the stage of construction, such as the electronic industry, petrol chemistry and plastic production. **On the other hand**, fundamental transformations had happened in the social and economic foundations. State and social ownership in all spheres had developed into the dominating
type of property. In 1962 agricultural production cooperatives cultivated some 85% of arable land. 85.5% of the gross national product was produced by nationally-owned and cooperative enterprises. As a result, the social structure had undergone decisive changes.

This change of conditions called for a further development of the entire management-, planning- and incentive system of the economy. A review of the economic mechanisms and regulations practised in this field had shown that it was urgently needed to raise the level of identification, planning and the mode of action of the financial value-oriented processes. Above all, this applied to the formation of prices and to the role of profit. By the way, it was not an aspect only specific of the GDR that centres of gravity in the development had to be considered, but all industrially developed socialist countries faced these questions and put them into the centre of consideration against the background of their economic reforms.

In the wake of implementation one of the difficulties was that there was the need for changes in practice within the entire economic mechanism which had to be carried out on not yet sufficiently elaborated theories. For this reason, the theoretical discussion was compelled within a short period to take up fundamental questions of socialist economics and to chart lines of solution. This especially applied to the causes and the nature of commodity production and the commodity-money relations in a socialist economy, the scientific foundations of price formation, the role of profit as a criterion of success of economy, the formation of the context between material and financial planning, etc. Notably on these questions there was an intensive international
discussion which had also a great influence on the GDR. Important theoretical views which were taken into account by the economic reform beginning in 1963 (this reform was called "New Economic System of Planning and Management of the National Economy") were the following:

- Socialist production is a planned production of commodities
- The enforcement of the law of value makes it necessary that prices be formed on the basis of the social expenditure for work. Capital (fund) advances have to be considered in the price.
- The profit is the central indicator of performance evaluation at the level of enterprise.

Based on these and additional views the industrial price reform was carried out in several stages. At the beginning, the fixed assets and the depreciation rates were re-evaluated. The calculation of profit was an essential issue. Profit had so far been calculated on the basis of prime costs, that caused the negative effect of prompting an increase rather than a reduction in prime costs. Therefore, in the interest of prime cost reduction, other measures had to be taken and obligations imposed that were mainly administrative rather than economic. The first step to eliminate this effect was to calculate the profit on the basis of net performance, while the next and concluding step was to use the totality of material funds (the productive capital) as the basis for profit calculation. It was this solution that was in conformity with the role of fixed assets that had grown in industry and building trade. The price thus formed was given the name: fund price. Coupled with it was the introduction of a charge for the production funds (production charge) that was generally fixed at 6% for all branches of industry.
The charge payable to the State budget by the enterprises was to stimulate the utilization of funds (of capital). To a certain extent such an effect was reached.

The greater orientation of the economy towards economic management focused the attention on the criteria of efficiency and performance and on increasing the responsibility of the enterprises themselves. As to the criteria of performance a solution was expected to be found from the indicator of national income at the level of the entire economy and from the profit at the level of enterprises. An increase in the self-responsibility of enterprises was achieved by applying the principle of the self-regeneration of resources to the majority of funds for reproduction (especially the investment funds). The indicator 'profit' to be used as a yardstick of performance had positive and negative effects. Positive effect was that production was linked to the sales of products, which promoted the influence of users on production. Negative was that the progress in price formulation was not sufficient to reach a degree of price flexibility which in every stage secured the enforcement of the principle that the profit made was a genuine reflection of performance. As a necessary result, disproportions were created between profit and performance. Furthermore the principle of the self-regeneration of resources was also not effectively put through since the funds were sometimes unavailable. Thus at the end of the 60's when several practical results from the reform were available the experience gained so far showed that the profit alone could not be the only yardstick for performance, but only in conjunction with several other indicators. Further deliberations continuing up to the present time have been strongly influenced by this view.
Another aspect of the reform was the search for a more effective type of structure in the organization, management and planning of the economy. The basic concern was to supersede the tendencies of a preferably administrative management and to combine the necessary function of the administrative management with the economic management. The "Unions of Nationally-Owned Enterprises" as branch lines were an important institution of management that existed up to the beginning of the 80's. They provided the indispensable level of management between enterprises and ministries with a view to putting through the principle of planning and management according to main producer groups. The experience gained with them in the 60's had indicated that it was necessary to adapt the management structure still more consistently and directly to the reproduction process in the enterprise. As a consequence, by the middle of the 60's, it was begun to establish economic units that combined all the important enterprises and institutions contributing to materializing a definite direction in production. This economic unit was given the name "Combine". By 1970, 37 combines had been established which were directly subordinate to the industrial ministries.

The establishment of the combines covered a longer period (up to the beginning of the 80's) and was accompanied by a steady utilization of experience gathered with the existing combines. To obtain a greater measure of managerial safety an additional type of management was developed: the cooperations union. The merger to cooperation unions was based on the same principle as the establishment of combines, namely the cooperating enterprises and institutions began to plan jointly and to coordinate the processes of research, development, designing, manufacture and sales. A generalization
of the experience has shown that the combine was the more effective type, so that increased efforts were made to establish them. The combines also provided the requirements to abolish the "Union of Nationally-Owned Enterprises".

The Economic Reform of the 60's was a decisive step to continue developing the mode of functioning of the GDR planning and management system and to increase its effectiveness. Not everything that was introduced in those years stood the test of time. The positive outcome of the reform was that above all the transitional process of the economy from a preferably extensive growth to a mainly intensive growth was put into operation by changing the mechanism of the economy. An important finding has been that the value indices in the economic process can be only consolidated if these indices are of equal value to the natural indices and, in coordination with them, are subject to planning. Any views still existing, in part, in the 60's, suggesting that planned economy has also to be understood as a partial regulation outside planning have not come true.

3.2. Measures in the 70's

In the 70's the questions of an intensification of the economy and an acceleration of the scientific-technical innovation processes came more and more into the foreground of attention. Intensification was coupled with the demand for achieving a greater transparency of economic processes in an attempt to substantiate the decision-making process in planning in a more scientific manner and to develop effective solutions. Scientific-technical progress pointed out to the need to increase the flexibility of the planning system and reacting more quickly to a change in the conditions of production and the market. Therefore the efforts were focused
primarily on the further development of the planning system as such, on the evaluation of performance and the economic stimulation of scientific-technical progress.

a) **Regulations of Planning**

For the purpose of making planning uniform and easy to survey the "Regulations for Planning the National Economy of the GDR" were developed at the beginning of the 70's, providing the fundamental legal regulations for the methodology of planning. These regulations are binding on the planning bodies at all levels. The content is: principles and methodology for drawing up the 5-year-plans, the annual plans, the State budget plans, the balances of the crediting system and the draft plans; the planning of the measures for price development; stipulations on the responsibility and the tasks in coordinating the plans; stipulations on economy-wide planning, the balancing and the plan coordination as well as on the sequence of plan elaboration and on the indicators to be used.

On the basis of the regulations of planning the "General Directive for the Planning in Combines and Enterprises of Industry and Building" was drafted, encompassing the State requirements for planning in combines and enterprises.

Both documents, the regulations of planning and the general directive have been subject to continuous supplementation, with the aspects of the admissible simplification of regulations playing an important role in an effort to cut back expenditures for planning.

b) **Evaluation and appraisal of performance**

Proceeding from the experience gained in the 60's in the wake
of the economic reform the efforts were focused on the development of a system of indicators, with the help of which the performance reached by combines and enterprises was to be measured and evaluated. The problem was to define a limited number of indicators out of the great number of plan indicators, which lent themselves to measure sufficiently exactly the performance attained. The State plan indicators comprise all decisive indicators relating to the production and reproduction processes as an expression in kind and value. To them belong, among other things, the indicators of gross production, net production, material consumption, the fund of fixed assets, investments, labour productivity, profitability, profit, exports and imports and payments to the budget. The decision on what indicators should be used for the measurement of performance was essentially influenced by the major tasks of economic development. Although economic growth had more and more been aimed at increasing the quality of products, which was the outcome and the requirement for an acceleration of scientific-technical progress, the quantitative increase in the production volume continued to play a decisive role in the 70's. This entailed the need to encompass the indicator "Industrial Commodity Production" (i.e. the finished products turned out by the enterprise), i.e. an indicator which is very close to gross production, in the measurement and evaluation of performance. At the same time the indicators "net production" and "basic material" were incorporated in this system. Net production corresponds to the macro-economic performance criterion and as an indicator is orientated towards the qualitative effectiveness of the growth factors. The indicator 'basic material' is orientated towards a cutback in material consumption, especially
in saving energy and raw materials. The GDR dependency on imports for most raw materials (with the exception of lignite and potash) and the increasing restrictions due to the price development in the markets were the compelling reason for a greater economical use of materials and resources.

Starting in the middle of the 70's three basic indicators (industrial commodity production, net production, basic materials) were applied to evaluating the performance of combines and enterprises. A growing share in production (about 40 % of the GDR national income is contracted by foreign trade) led to the conclusion by the end of the 70's that the indicator 'export' (foreign exchange earnings) had to be included in this system. The experience gained with this system of indicators had shown that the economic levers for reaching a higher quality of products (via the indicator of 'net production') were in part underest by the indicator 'commodity production' which by itself exerted great pressure on growth by quantity. As a result, the positive effects of the indicator 'net production' proved fairly ineffective. Based on this experience it was recognized that the search for net indicators has to be continued.

c) Stimulation for new products

The international scientific and technical innovation processes especially caused by micro-electronics prompted the search for suitable methods to economically stimulate the development of newly designed and re-designed products. The idea was to find solutions on how to stimulate the interest of manufacturers and users (buyers) alike in a rapid renewal of products and technologies. Considering the social foundations of planned economy a solution could not have been reached in competition between
manufacturer and user (principle of competition), but rather in a cooperative emulation between both.
The problem to be decided was the price formation between comparable (substitutable) products. With these products it became virtually apparent that the stimulation for improved and new products was essentially dependent upon how the change in the use value had been included in price formulation. Accordingly, the suggestion was to measure the improvement of the use value and, together with the expenditure for labour, to use it as a basis for price formation. However, two complicated problems were related to it. First, a comparative product had to be defined, the use-value parameters of which had to serve as the yardstick for comparison. Secondly, the methods for measuring the use-value had to be established. Both tasks have so far been solved only by approximation. The choice of a comparative product was directly connected with the criteria of performance measurement which were still insufficiently geared to an uncompromising comparison with the world standard. In addition, there was still not enough economic pressure available to establish a comparison with the top-level product in this line. Thus changing the situation would have only been feasible if the method of price formation had been re-developed in coordination with the measurement of performance.
The experience gained in the 70's in the course of further developing the system of planning and management was continuously evaluated and thus provided an important basis for the preparation and application of advanced and new regulations at the beginning of the 80's (see item 5).
4. The results of the economic development of the GDR

In the 35-year history of the GDR the planned management of the economy has led to remarkable results. Looking back on the period from 1970 to 1984 when the majority of industrial countries suffered from a decline in growth rates in comparison to previous periods the GDR was able to reach an average annual growth of 4.6% in the produced national income and of 4.3% in labour productivity. Looking at the first four years of the 80's when the world economic conditions were further complicated, the following picture is obtained (Table 4).

Table 4
Annual Growth Rates in the GDR (in percent)

<table>
<thead>
<tr>
<th>Year</th>
<th>National income</th>
<th>Net production (industry)</th>
<th>Labour productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>4.4</td>
<td>5.5</td>
<td>4.3</td>
</tr>
<tr>
<td>1981</td>
<td>4.8</td>
<td>5.4</td>
<td>4.6</td>
</tr>
<tr>
<td>1982</td>
<td>2.5</td>
<td>3.5</td>
<td>2.2</td>
</tr>
<tr>
<td>1983</td>
<td>4.4</td>
<td>6.6</td>
<td>4.2</td>
</tr>
</tbody>
</table>

Growth in 1982 was achieved with an absolutely declining use of energy, raw materials and materials (the growth of productive consumption was -0.8%). This was the result of an effective economical use of raw materials, and the allocation of quotas on imports. The continuation of economic growth, in the face of a relative depletion of the sources for savings with machines and raw materials can only be kept stable if the scientific and technical progress is accelerated and the effectiveness of investments is raised. Thus productivity and effectiveness have to be adequately increased in an attempt to be in a position to continuously enhance the living standard. The road embarked upon by the GDR to reach this
goal is to carry out a pervasive intensification of the economy, with rationalization playing a key role.

Although the GDR takes only the 99th place as to the size of its territory and the 39th place as to its population in the world, it ranks among the first ten with regard to the scope of its produced national income, the produced national income per capita of the population and to labour productivity among the industrial countries (compare the development in Table 5). This economic potential led to a considerable increase in the living standard of the population especially in the past 15 years.

Table 5
Produced National Income per each Working People

<table>
<thead>
<tr>
<th>Year</th>
<th>Produced National Income per Each Working People in the Field of Production Mark</th>
<th>Average Expenditure of Labour of a working people in the field of production per 1000 M of national income hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>17,680</td>
<td>100</td>
</tr>
<tr>
<td>1975</td>
<td>22,856</td>
<td>75</td>
</tr>
<tr>
<td>1980</td>
<td>27,434</td>
<td>61</td>
</tr>
<tr>
<td>1981</td>
<td>28,696</td>
<td>58</td>
</tr>
<tr>
<td>1982</td>
<td>29,358</td>
<td>57</td>
</tr>
</tbody>
</table>

Source: Calculated according to the Statistical Year-Book of the GDR 1983 and 1984.

Since 1971 the housing conditions have been perceptibly improved for more than 6 million people (in 1983 the living population in the GDR was 16.7 million) as a result of new construction, reconstruction and modernization of some 2 million dwellings. Up to 1990 similar improvements will be reached for another 4.3 million people. The GDR, with at present some 400 dwellings per 1000 inhabitants, takes a leading position in the world. In addition, the rents in the GDR are low and stable and account for some 5% of
the family income on an average.

Real income was continuously increased over the same period. It is composed of the earned income (wages and salaries) and the income from the social funds (Table 6). The income from the social funds increased rapidly. While in 1970 its share in the gross receipts was 26.2%, it rose to 31.1% in 1983. On an average each family receives about 10,000 Mark of monetary and gratuitous allocations from central State funds.

The increase in the real income resulted in a far better satisfaction of the material and cultural needs. This is especially reflected in the development of the per-capita consumption of consumer goods (compare Table 7). Agriculture had a substantive share in this development. Due to specialization and intensification it was possible to increase the yields of grain per hectare from 28.2 (1970) to 39.7 (1983) decitons. With only 0.37 hectare of agricultural arable land per capita of the population GDR agriculture in 1982 produced 110 kg of meat and 480 kg of milk per capita. By international standards these are comparably good results.

Table 6
Available Real Income of Workers' and Employees' Households (per month, effective prices) x/ provisional figures

<table>
<thead>
<tr>
<th></th>
<th>1970</th>
<th>1975</th>
<th>1980</th>
<th>1983x/</th>
<th>Mark</th>
<th>Mark</th>
<th>Mark</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross earned income</td>
<td>1095</td>
<td>1381</td>
<td>1676</td>
<td>1816</td>
<td>1676</td>
<td>1676</td>
<td>1676</td>
<td>1676</td>
</tr>
<tr>
<td>Income from social funds</td>
<td>389</td>
<td>572</td>
<td>711</td>
<td>818</td>
<td>711</td>
<td>711</td>
<td>711</td>
<td>711</td>
</tr>
<tr>
<td>among them</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public education and culture</td>
<td>146</td>
<td>233</td>
<td>286</td>
<td>323</td>
<td>286</td>
<td>286</td>
<td>286</td>
<td>286</td>
</tr>
<tr>
<td>Public health and social welfare</td>
<td>146</td>
<td>185</td>
<td>225</td>
<td>250</td>
<td>185</td>
<td>185</td>
<td>185</td>
<td>185</td>
</tr>
<tr>
<td>Gross income (total)</td>
<td>1484</td>
<td>1053</td>
<td>2387</td>
<td>2634</td>
<td>1484</td>
<td>1484</td>
<td>1484</td>
<td>1484</td>
</tr>
<tr>
<td>Available real income</td>
<td>1326</td>
<td>1738</td>
<td>2117</td>
<td>2338</td>
<td>1326</td>
<td>1326</td>
<td>1326</td>
<td>1326</td>
</tr>
</tbody>
</table>

Source: Statistical Yearbook of the GDR 1984, p. 276
Table 7
Per-Capita Consumption of Several Foodstuffs and Luxuries in the GDR

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Flour for bread kg</td>
<td></td>
<td>103.4</td>
<td>120.4</td>
<td>96.2</td>
<td>92.2</td>
<td>88.8</td>
<td>91.6</td>
</tr>
<tr>
<td>Potatoes kg</td>
<td></td>
<td>170.8</td>
<td>219.3</td>
<td>173.9</td>
<td>153.5</td>
<td>142.7</td>
<td>143.6</td>
</tr>
<tr>
<td>Meat kg</td>
<td></td>
<td>46.8</td>
<td>22.1</td>
<td>59.0</td>
<td>66.1</td>
<td>89.5</td>
<td>92.1</td>
</tr>
<tr>
<td>Butter kg</td>
<td></td>
<td>7.0</td>
<td>4.2</td>
<td>13.5</td>
<td>14.6</td>
<td>15.2</td>
<td>15.7</td>
</tr>
<tr>
<td>Certified milk litre</td>
<td></td>
<td>127.0</td>
<td>71.7</td>
<td>94.5</td>
<td>98.5</td>
<td>98.7</td>
<td>105.4</td>
</tr>
<tr>
<td>Eggs, pieces</td>
<td></td>
<td>117</td>
<td>63</td>
<td>197</td>
<td>239</td>
<td>289</td>
<td>301</td>
</tr>
<tr>
<td>Sugar and sugar products kg</td>
<td></td>
<td>22.9</td>
<td>20.2</td>
<td>29.3</td>
<td>34.4</td>
<td>40.6</td>
<td>39.2</td>
</tr>
<tr>
<td>Pure coffee kg</td>
<td></td>
<td></td>
<td></td>
<td>1.1</td>
<td>2.2</td>
<td>2.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Non-alcoholic beverages, litre</td>
<td></td>
<td></td>
<td></td>
<td>30.9</td>
<td>40.8</td>
<td>81.3</td>
<td>91.8</td>
</tr>
<tr>
<td>Beer litre</td>
<td></td>
<td></td>
<td></td>
<td>68.5</td>
<td>79.5</td>
<td>95.7</td>
<td>139.1</td>
</tr>
<tr>
<td>Vegetable kg</td>
<td></td>
<td></td>
<td></td>
<td>60.7</td>
<td>84.8</td>
<td>93.8</td>
<td>90.7</td>
</tr>
<tr>
<td>Fruit</td>
<td></td>
<td></td>
<td></td>
<td>46.5</td>
<td>55.5</td>
<td>71.1</td>
<td>76.3</td>
</tr>
</tbody>
</table>

1/ 1965  2/ 1955

Planned development is also reflected in the high level reached in the educational qualification of the working people. Thanks to educational planning and policies, the share of working people with completed vocational training in the total number employed rose from 60.8% (1971) to 83.3% (1983), with the share of working people in university and college graduates increasing from 11.6 (1971) to 20.1% (1983). The great intellectual potential is a decisive requirement for adopting more and more intelligence-intensive and thus materials-saving productions prompted persistently by scientific and technical progress.

Foreign trade plays a growing role in the economy of the GDR. The intense import dependency of the GDR in raw materials and feedstock
for production and the change in the market conditions undergone in the 70's (oil crises, price explosions, etc.) have raised the demands to be made on the quality and quantity of exports to a decisive extent. Thus foreign-trade turnover (total), measured by comparable prices, rose from 100 (in 1970) to 219% (in 1983), i.e. it doubled over this period. The structure of foreign-trade turnover changed, as shown in Table 8. However, the structure of exports and imports changed as well (Table 9).

Table 8
Structure of Foreign Trade Turnover in Comparable Prices (basis 1970)

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of groups of countries in foreign trade</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Socialist countries</td>
<td>among them</td>
<td>Non-Socialist</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CMEA countries</td>
<td>countries</td>
</tr>
<tr>
<td>1970</td>
<td>100</td>
<td>72</td>
<td>67</td>
<td>28</td>
</tr>
<tr>
<td>1975</td>
<td>100</td>
<td>73</td>
<td>69</td>
<td>27</td>
</tr>
<tr>
<td>1980</td>
<td>100</td>
<td>69</td>
<td>65</td>
<td>31</td>
</tr>
<tr>
<td>1981</td>
<td>100</td>
<td>67</td>
<td>64</td>
<td>33</td>
</tr>
<tr>
<td>1982</td>
<td>100</td>
<td>68</td>
<td>64</td>
<td>32</td>
</tr>
<tr>
<td>1983</td>
<td>100</td>
<td>65</td>
<td>62</td>
<td>35</td>
</tr>
</tbody>
</table>

Table 9
Structure of Exports and Imports (percent, effective prices)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Machinery, equipment and transport means</td>
<td>export</td>
<td>51.7</td>
<td>51.3</td>
<td>48.5</td>
</tr>
<tr>
<td>import</td>
<td>28.2</td>
<td>28.8</td>
<td>32.3</td>
<td>29.9</td>
</tr>
<tr>
<td>Fuels, mineral raw materials, metals</td>
<td>export</td>
<td>10.1</td>
<td>14.8</td>
<td>18.5</td>
</tr>
<tr>
<td>import</td>
<td>20.0</td>
<td>26.7</td>
<td>39.9</td>
<td>39.6</td>
</tr>
<tr>
<td>Other raw materials and semi-manufacturers</td>
<td>export</td>
<td>7.4</td>
<td>5.4</td>
<td>6.9</td>
</tr>
<tr>
<td>import</td>
<td>30.1</td>
<td>18.9</td>
<td>16.3</td>
<td>17.8</td>
</tr>
<tr>
<td>Industrial consumer goods</td>
<td>export</td>
<td>20.2</td>
<td>14.8</td>
<td>14.2</td>
</tr>
<tr>
<td>import</td>
<td>4.3</td>
<td>5.0</td>
<td>4.1</td>
<td>4.4</td>
</tr>
<tr>
<td>Chemical products, fertilizers, organic building materials</td>
<td>export</td>
<td>10.6</td>
<td>12.7</td>
<td>11.9</td>
</tr>
<tr>
<td>import</td>
<td>5.6</td>
<td>8.6</td>
<td>7.4</td>
<td>8.2</td>
</tr>
</tbody>
</table>

The coordinated cooperation within the framework of CMEA, especially with the U.S.S.R., provides the foundation for foreign trade and foreign economic activities. As a rule, the exchange of commodities with the CMEA-countries is based on agreements concerning specialization and cooperation. In the economic relations with the developing countries the exports are connected with scientific-technical cooperation, assistance in the training of cadres, consultations and after-sales service. The trade and economic relations with capitalist industrial countries are continued to be developed on the basis of equality of rights and reciprocal advantage.

5. Directions of Further Development of Economic Mechanisms in the 80's

At the beginning of the 80's, due to the termination of the formation of combines, a new structure of organization in economy was established, enabling a uniform and direct connection between the central State management and the management of the combines. At the same time this change created the preconditions for a more consistent enforcement of the principle of individual management. Proceeding from this pervasive change in organizational and management structures the idea was to put through the demands for a comprehensive intensification of the economy. This brought up again the questions of a further development of the mechanisms of economy. Starting from the new demands and foreseeable tendencies of development and in consideration of the experience gained in the 60's and 70's, in 1983 complex measures were decided upon for the complementation of the management and planning system and for the system of economic accountancy. These measures have been in force since 1/1/1984. Since their period of validity is still relatively short
it is not possible to make already well-founded statements on their
way of functioning. Their essential content shall be described
in the following, with several theoretical deliberations by the
author.

The measures of 1983 concern the following fields:
- Management
- Planning and balancing
- Measurement and evaluation of performance
- Economic accountancy.

No additional comments on management shall be made here, compare
item 2.3.

Planning and balancing

Measures for the further strengthening of balancing and the greater
role of standards and normatives are in the centre of attention.
Qualification shall be made in the following directions:

a) Increase in the conclusiveness and meaningfulness of balances
by an additional specification in conformity with the change in
requirements for the reproduction process;

b) Increase in the number of central and combine balances by those
expressing the specific requirements (important energetic materials,
raw materials and foodstock, effective export products, especially
consumer goods and sub-supplies) for intensification;

c) Increased flexibility of balancing especially by an essential
reduction in the times of order and delivery;

d) Increased role of standards and normatives, especially the energy
and material consumption norms. This shall be reached by a closer
connection between the preparation of norms and standards and the
planning of science and technology as well as by the use of EDP with
a view to a greater rationalization of standardization activities.
Measurement and evaluation of performance

Far-reaching changes are under way in this field. The system of indicators to measure the performance of combines and enterprises was modified as follows: the indicators "commodity production", "net production", "basic material" and "export" were superseded by the system "net production", "profit", "consumer goods" and "export". By eliminating the indicator "commodity production" the measurement of performance was orientated more towards an increase in economic quality. The inclusion of the indicator "profit" means that the sales of products had again been elevated to an important aspect of performance evaluation. Thus, both production and sales were subject to performance evaluation, with the indicator "export" separately referring to foreign-exchange proceeds. A new indicator was the index "consumer goods". This is explained by the policy emphasis on raising the quality of consumer goods and services for the population.

Economic accountancy

The measures to be taken in relation to prices are closely associated with a change in the system of indicators for the measurement and evaluation of performance. The positive effect of profit as a criterion of performance is directly dependent upon a correct formation of prices. The following changes were initiated:

a) Social Costs to be integrated into the production costs of enterprises

The calculation of costs of labour had so far been based only on wages, i.e. those expenses accruing and to be paid to the worker as a monetary equivalent. But the social expenses incurred by the society for the funding of the production of labour and bestowed on the worker in the form of gratuitous allocations had not been considered.
The appraisal of labour in the price of the product was therefore too low.
The theoretical discussions of the 60's had already called for a solution to this problem. However, the suggestions put forth in this context had not been taken up, yet they were rejected, arguing that social expenditures would be subject to different laws due to their formation and use compared to wages. Nevertheless this question remained unresolved. With the persistent increase in social expenditures and with the growing demands for a more effective use of the labour potential available there was the growing need for a practical solution in this field.
The changes in 1983 had shown that about two thirds of the social expenditures (the subsidies for basic foodstuffs account for the remaining third not subject to this consideration) were included and added to the production costs of the enterprise. To provide an economic incentive for the deployment of labour a "Contribution to Social Funds" (a labour charge) to the amount of 70 % of the actual wage fund has to be remitted monthly to the State budget.
b) The factory prices are lowered in an attempt to avoid any increase in the price level. Coupled with this is the differentiated reduction in unjustifiable profitability rates. As a result the margin of profit becomes smaller and its effects on cost reduction are more favourable.
c) On account of additional remittances resulting from a poor economy of fixed assets and investments the efficacy of the production charge will be increased.
d) In continuation of the price-formation principle for new products (compare item 3.2.) it is demanded to establish upper limits for costs and prices, with their formation inevitably to be done on the basis of the internationally most favourable costs and
performance parameters. These upper limits have to be laid down in the enterprise and be confirmed by the State.

e) An agrarian price reform will be carried out in coordination with a change of prices in industry. The aim is to cut back the subsidies granted to agriculture by the State in the form of low prices of industrial products (agricultural machines and implements) since the 40's and to adopt the industrial prices together with the resulting increase in agrarian prices. Thus realistic standards of value are being created by the industrial prices when they become fully effective in agriculture and a cost reduction will be encouraged. At the same time, both in industry and agriculture, uniform conditions are created for calculations of economy. The agrarian price reform will be carried out in several stages up to 1986. The increase in agrarian prices will not affect those consumer goods prices that are subsidized. It is that the subsidies for these goods will increase.

6. Several problems in the discussions on planning

The emergence and establishment of the planned economy together with its corroboration as an effective form of social and economic management and organization was a complicated and protracted process. Planned economy, as a manifestation and necessity of social upheavals of the 20th century, had to be developed on the strength of experience in practice and had to be complemented accordingly. Even in the present time this process is put into effect at a higher level, with the transition to an intensive economic growth requiring the adjustment of the economic mechanisms to this type of growth.

Therefore, from the very beginning, questions have inevitably been asked about the functions of planning at various levels, about
a reasonable limitation to these functions and about the relationship between plan and market. Questions have been asked about the nature of the plan indicators, to what extent they have to be determined in kind and value. Finally the development of electronic data processing and computer engineering as well as sophisticated mathematical methods have raised partly new ideas in planning.

In conclusion, these questions shall be considered briefly. They have for long been discussed internationally and the questions have been answered from different scientific standpoints.

**Plan - market**

A crucial finding gained in the course of the development of the national planning systems is that the planned economy can operate effectively only if the economic subsystems show a great degree of self-responsibility within the framework of implementing the society-wide tasks and targets. This knowledge has been continuously reaffirmed by practice. The idea that the economy could be planned and managed from a uniform centre down to all the detailed processes was possible to emerge as a historically transient view (war communism), but it was never in conformity with the longer-term requirements (war-time communism was superseded in 1921 by the "New Economic Policy"). The real development of the planned economy has always been characterized by the fact that the central planning functions were strengthened in conjunction with a further consolidation of decentralised functions of planning and management.

However, this process has been nationally determined both in theory and practice. The emphasis on national characteristics is currently of topical interest because of the different ways and experiments tested and carried out in several countries that are aimed at increasing the independence and responsibilities of enterprises.
A stronger self-responsibility of the economic sub-systems can have positive social effects only when the planning of the major developmental processes remains the prerogative of the State and the central economic plan retains the character of a directive rather than that of a non-committal orientation. A greater attention to market processes during planning is also included in this consideration.

History has shown that simplified views on the relationship between plan and market were reduced to absurdity. The thesis of plan and market as two opposite views has become rather outdated. The market has to be conceived as a link of the national economic reproduction process, as a sphere to be dominated in its specifics in a planned manner. The market is integrated into planning without ignoring the fact that the individual behaviour of the buyer cannot be planned.

**Planning in kind and value**

As to the recognition of commodity production and commodity-money relations by the socialist planned economy a long process of clarification was required which was rooted in the view that planned economy and money relations were incompatible with each other. This view was also the point of departure for occasional attempts to convert the economy into a barter economy. These attempts were doomed to failure since they overlooked the fact that a complicated and interrelated economic body cannot be effectively planned and managed without the existence of comparable indicators for evaluation. And it is the value and the price providing the basis for such indicators.

On the one hand, the discussion dealt with the question about the
causes and the specifics of commodity production under Socialism and, on the other hand, about the problem of price. The view that commodity-money relations are plannable and are embedded in planning rather than being juxtaposed gained more and more ground on account of the experience gained in practice. The function of prices in the planning process is primarily to make the different physical forms comparable with each other, enabling thus an economic calculation on effectiveness. The answer is, like the question of plan and market, not at all a comparison between planning in kind and planning in value, but rather their connection and coordination. The further development of the planning system in conformity with the requirements of intensification has to devote itself still more intensively to the question of qualification of value-oriented planning, since the considerations on effectiveness will find in it a persistently higher priority.

Planning - computer engineering - mathematical modelling

Computer engineering and economic-mathematical models, notably input-output- and optimization models, have opened up new and ample opportunities for planning. Electronic data processing and modern computer engineering have created the preconditions for a rational processing of information. Economic-mathematical models enable the scientifically substantiated decision-making process. The entire planning process has been made and will be formed more effectively as a result of these developments. The use of this sophisticated instrumentation exerted also a major impact on the theory of economy and planning. The demand for making optimal decisions suggested the idea of optimal planning. Such a concept was developed in the 60's in connection with the broad
use of economic-mathematical models in economics. Essentially, the benefit was that this concept combined planning with optimization and that the planning process was regarded as an optimization process.

Prompted by the possibilities in computer engineering the idea had again been suggested to centralize the planning processes. Such an approach would concentrate the quasi total information in one place (the centre of planning), a theoretical possibility that would not be in keeping with social requirements.

Planning under socialism is by no means reduced to a technical and organizational approach. If it were so it would be possible, some time or other, to plan and control almost all economic processes from one centre. Planning, as a mainly socially oriented process however, has to go beyond such a narrow approach, since it is primarily aimed at the activation of man in the establishment of plan. The concept of the "total" computerization of the economy, however, is suggesting an image of man, conceiving him as the recipient of an order and an executing puppet. But such an image of man would be inconsistent with the aims of socialism worth striving for, i.e. to develop the personality of man in an all-sided manner.
Literatur


