

EPEA: History, Organization and Functions

The Revolution of April 1st 1964, and the subsequent appointment of Dr. Roberto Campos as Planning Minister and Dr. Otávio de Bulhões as Finance Minister, paved the way for the formation of a high-level planning organization within the Brazilian government, comprised mainly of Brazilians but with some foreign consultants. Soon after the new Cabinet assumed power, this idea was discussed in general terms by Ministers Campos and Bulhões, AID Minister-Director Kubish, and U.S. Ambassador Lincoln Gordon. It was agreed in principle that AID should assist the Brazilian government in building up a competent staff for the new Ministry of Planning.

At this point Minister-Director Kubish wrote to Professor Benjamin Higgins of the University of Texas, asking him whether he was willing to join in this venture. Professor Higgins replied that he was about to leave for Brazil on a brief mission for the University of Texas, and would be happy to discuss the proposal upon his arrival. After a discussion with Ambassador Gordon, Minister-Director Kubish and Minister Roberto Campos, Professor Higgins agreed to return to Brazil at the beginning of August as head of a group of foreign experts to assist the Ministries of Planning and Finance. He also agreed to devote the few days he had available in May to launching the project.

Discussions with the Ministers of Planning and Finance, the Fundação Getúlio Vargas, and AID personnel resulted in a tentative list of posts for the foreign team. A cable was drafted and sent to several dozen economists regarded as particularly well qualified for these posts. A

follow-up letter, to be sent to those who replied favourably to the cable, was also drafted. Professor Higgins returned to Rio at the beginning of August. USAID-Brazil had received a number of favourable responses, but with some ambiguity as to the time of availability. Fresh contacts were made with those economists who had indicated any possibility of availability during the first semester. Some received offers, but more time was lost in negotiations, by letter and cable, regarding terms of appointment. As a result, the beginning of the academic year went by with only two acceptances, from Professors Eastin Nelson and H. K. Snell of the University of Texas.

By this time it had become apparent that recruiting through USAID-Brazil was not and could not be effective for this kind of operation. It was therefore determined to seek an American base. The first thought was that USAID-Washington might handle the recruitment, but this approach proved not to be feasible. Mr. John Kaufmann, who had arrived in Rio in late August as Assistant-Director for Economic Development Policy of AID, was in Washington during October and contacted a number of universities, none of which was able to make a firm commitment at that time. At the end of 1964 the only foreign experts in EPEA were still the three professors from the University of Texas.

Meanwhile, on the Brazilian side better progress had been made. The original idea had been to attach the foreign team to ANPES/(Associação Nacional de Programação

Econômica e Social), a privately financed research organization of which Roberto Campos was President. This device would have provided some degree of political independence. However, the directors of ANPES decided that the modest ANPES finances should be invested rather than spent, and that most of the ANPES activities should take place in São Paulo. It was then apparent that this approach could not meet the needs of the Ministry of Planning. Accordingly, EPEA (Escritório de Pesquisas Econômica Aplicada) was established, by decree, as a research office within the Ministry of Planning, with responsibility for macro-economic analysis and for the integration of the work done by sectoral working groups within the Ministry of Planning. Some of the personnel intended for the Rio branch of ANPES were brought into the Ministry of Planning.

In mid-December the Brazilian staff of EPEA included six high-level technicians: Victor da Silva Alves Filho, economist, as Secretary-General; João Paulo dos Reis Velloso, economist (Yale), as Technical-Co-ordinator; Og Leme, economist (Ph.D. Chicago, several years with ECLA); Orlando Joseph Menezes, economist (Ph.D. Princeton, Econometric Institute, Indian Planning Commission); Rubens de Mattos Pereira, city planner (University of California, Mackenzie University); Vicente Unzer de Almeida, economist (Vanderbilt, Chicago), was heading a group of agricultural economists, on a half-time basis. Discussions were under way concerning contracts for particular research projects with ANPES, the Instituto Brasileiro de Economia, and the Delmiro Gouvêia Foundation. There was also a group of junior economists, statisticians, a secretarial staff, etc. (see attachment).

The preliminary draft of the Action Programme for 1964/66 was completed before EPEA began operating. It was assembled in a matter of weeks by an ad hoc group, working 'round-the-clock in collaboration with technicians in other Ministries. During the first two months of its existence, EPEA was primarily concerned with revision of the Action Programme, refining, expanding and generally improving the Action Programme, eliminating inconsistencies and weak parts in the original draft. EPEA also provided liaison with the foreign missions sent by OAS, CIAP, IMF, IBRD, BID, Eximbank, US Treasury, AID, etc. Efforts at recruiting, negotiations with other governments, etc. were also continued.

During the two months of the "invasion" by foreign missions (October-November) normal work of EPEA was almost completely disrupted by the need for discussions, providing documentation, arranging schedules, and other services to the foreign missions. Apart from the time and energy involved in servicing the missions, the presence of the missions really prevented the members of EPEA staff from having normal contact with the other ministries and government agencies. During this period Professor Higgins prepared an analytical English summary of the revised plan, which in modified form became the official Brazilian submission to CIAP. The members of EPEA also prepared a Brazilian summary of the revised Action Programme.

Thus, by the end of 1964 virtually no work had been done on the preparation of a long-run plan, apart from fact-gathering, general reading and analysis, and some internal discussion. A start had been made on the integration of State and Regional planning with national development planning, through the visit of Og Leme, Velloso and the three foreigners to São Paulo, Prof. Higgins' visit to Curitiba, and Mr. Rubens Pereira's visit to Porto Alegre and his work with the governments of Guanabara and São Paulo. However, the surface had barely been scratched in this crucial field of EPEA's operations.

The work program determined for 1965 was as follows:

I - Preparation and publication of a summary of the Action Programme 1964-66 in Portuguese, for wide circulation throughout the whole country; preparation of a similar document in English on the basis of Prof. Higgins' "Analytical Summary" and translation from the Portuguese summary.

II - Publication of the first volume of the Action Programme (in multilith), including a summary of the second volume and the tables on sectoral investment, together with a new chapter presenting the reconciliation of the sectoral programmes with balance of payments projections.

III - Establishment on a longer term basis of a mechanism for permanent planning, especially through improvement of EPEA (according to the following scheme).

IV - Preparation, in approximately one year, of a long-run perspective plan.

V - Extension of the Action Program up to 1967, thus establishing a system of periodical revision of the Action Program, so that it can always be projected for the next two years, making it a "rolling plan".

VI - Publication of monographs on subjects related to economic planning in Brazil, especially as a byproduct of the research undertaken on the program outlined above (for example, the study on the capital market which is being prepared under the supervision of Dr. Simonsen, and the study of integration of national and regional planning by Prof. Higgins).

1. Establishment of a Permanent Mechanism for Planning

1.1 - With a view to establishing a permanent process of economic planning in the country and to consolidate the organization of the Ministry of Planning, the following steps will be taken:

a) Increasing EPEA's technical staff, to complete the basic national planning nucleus and its international counterpart (on the basis of one senior and two or more junior or intermediate Brazilian economists for each

international technician, apart from administrative personnel);

b) establishment of an international advisory team, through USAID and other sources, working at EPEA, according to the Ministerial Decree which created EPEA;

c) improved staffing of the sectoral groups working at the Ministry of Planning, aiming mainly at providing them with economists and economic planners.

2. Elaboration of a Long Run Perspective Plan

2.1 - The execution of this programme, in approximately one year (depending upon the rate of recruiting technical personnel, Brazilian and foreigners, available financial resources, re-organization of the statistical system, and other institutional factors), involves two aspects:

a) the preparation of specific studies, necessary for a better knowledge of some crucial aspects of the present status of the Brazilian economy, including (according to the program already approved, in principle):

- 1) analysis of sectoral focal points of excess capacity;
- 2) study of the steel sector;
- 3) problem of ports and maritime transport;
- 4) completion of the National Tele-Communications Plan;
- 5) formulation of a policy of export promotion (especially in the ALALC area);
- 6) food supply problems;
- 7) policy for increasing agricultural productivity;
- 8) programming education to meet development needs;
- 9) integration of regional with national planning;

b) elaboration of the plan itself, considering, especially in the sectoral part, the results of the studies listed above.

2.2 - To attain this double objective, the preparation of a permanent planning mechanism will include the organization of two types of groups (apart from the sectoral groups already working in the Ministry of Planning):

3) Demonstration Planning Model for the Brazilian Economy

This project would permit the continuation of studies (which are still at their preliminary stage) for the preparation of a demonstration of short and long-term planning model for the Brazilian economy.

The financial considerations which have been made in connection with the Department of Rural Economy to be created by the Brazilian Institute of Economics in 1965, also apply to the above projects. The Fundação's estimate of expenditures for the year in which they will be executed is as follows:

Personnel	Cr\$ 38.2 million
Supplies & Stationery	0.6
Sundry	<u>0.5</u>
TOTAL	39.3

a) general planning group, with headquarters at EPEA, including Brazilian and foreign general planners. This group will be responsible for:

- the general structure of the plan (including the general scheme for sectoral plans);
- macro-economic planning (planning on the aggregate level) under EPEA coordination;

b) a group responsible for specific studies needed to accomplish the above programme (item 2.1 a); for this purpose the technical services of the Fundação Getúlio Vargas, might be used, as well as the Fundação Delmifo Gouvêia, ANPES, and other research institutions, Brazilian or foreign).

2.3 - Once the general scheme for sectoral programmes has been prepared by the general planning team; the Ministry sectoral groups — in coordination with planning commissions of other Ministries and regional planning agencies — will work on the elaboration of sectoral programmes, according to their possibilities and considering the volume of work already in their hands. The following instruments will be used to provide a better equipment of these groups:

a) technical assistance on sectoral planning from national and international research institutions (such as BIRD, UN, BID, etc.);

b) technical conferences for discussions of methods of planning and economic research.

2.4 - The first measures suggested in regard with the preparation of a long run perspective plan include:

a) organization of a working group at EPEA, to prepare a draft for the general plan;

b) intensive programme to obtain statistical data, under the supervision of a commission with representatives of the Presidency of the Republic, the Ministry of Planning, the Fundação Getúlio Vargas, IBGE, SUMOC (and others);

c) acceleration of recruitment of technicians, Brazilian and foreign, assigned to EPEA.

Feasibility Studies

In December 1964 a new organization was set up as a branch of EPEA to handle feasibility studies. It is called COEFI - Coordenação de Estudos e Financiamentos de Projetos. The proposed scheme for financing feasibility studies is as follows:

1. Procedure:

a) The Finance Minister will receive funds from loans and grants; the Fund thus created will be administered by the Planning Ministry;

b) COEFI will set the priority criteria for financing of feasibility studies of program and projects; it will also approve the loans;

c) there will be several financial agencies, BNDE, Banco do Nordeste, Banco de Desenvolvimento do Extremo Sul, etc.

2. COEFI is located on the 7th floor of the Ministry of Finance building. Its head will be Mr. Amorim. An economist and engineer has been hired, Mr. Diniz, to organize the office.

3. A submission for an AID loan to finance studies is ready for the Minister's signature.

T r a i n i n g

EPEA has taken the first steps towards establishing a system for training planners. Beginning early in 1965 a seven months course, with a total of 200 lectures, will be launched in Rio to train graduate economists and engineers in planning and programming. The lectures will cover mathematics, statistics, economic development, mathematical economics, input-output analysis, linear programming, and general economic planning. Members of the EPEA staff and of IBRE will provide lectures and seminars.

It is hoped that similar courses can be established in all centers where a significant amount of planning is being done (São Paulo, Curitiba, Porto Alegre, Salvador, Recife, Fortaleza). At the state and regional level the courses would include physical planning.

Meanwhile a kind of "in-service" training system has been established by assigning junior economists to work with foreign experts, and setting up working groups within EPEA. For example, Professor Higgins is heading a group on integration of state, regional, municipal and national planning.

Thus at the end of 1964 the work of the new Brazilian Ministry of Planning was in a transition phase; it was in the course of moving from the Action Programme for 1964-1966 to the preparation of a long-run perspective plan. Certain steps remained to be taken to complete the first, short-run planning phase of the new Ministry's operations. The revised summary of the Programme in Portuguese, taking into account the revision of the basic document was in Press. It is somewhat more technical and analytical than the summary prepared, essentially for the press, in August. Volume I of the Programme, together with the summary of Volume II, was ready for publication in Portuguese. Some publication in English was also contemplated, perhaps a blend of the new Portuguese summary and of the Submission made in English to CIAP.

The Brazilian Government intended to establish a top-level Committee to review progress with the Action Programme, and to assure conformity of actual operations of the various Ministries and agencies involved with the targets established in the Program. A similar high-level Committee had already been established to assure conformity with the budget. It is planned to move both DASP (Budget Control) and IBGE (statistics) into the Ministry. The Ministry of Planning will have some responsibilities for the preparation of documentation to be submitted to these Committees. The Ministry may also co-operate in the preparation of Progress Reports on the implementation of the Programme, perhaps including the annual State of the Nation Address of the President. Finally, as stated above, it is envisaged that the Action Program itself should be a "rolling plan"; i.e., it will be revised every year, with the projects already completed during the past year dropped from the Programme and projects for one more year added. Thus over the next year an Action Programme for 1966-1969 should be prepared, and late in 1966 a Programme for 1967-1970 should be completed.

Important and onerous as these responsibilities are, over the next year the main function of the Ministry, and particularly of the Office of Applied Economic Research in the Ministry, will be to prepare a long-run perspective plan for the Brazilian economy. None of the plans previously prepared for Brazilian economic development completely fulfilled the requirements of a long-run perspective plan for the Brazilian economy as a whole. Such a plan requires for its foundation a thorough understanding of the nature and operation of the Brazilian economy in all its aspects. It also requires a throughout analysis of the interactions of development in various sectors and regions of the economy, and the relations of all these to the development of the national economy as a whole. It should include an informed and hard-headed appraisal of the prospects for all major types of economic activity in this country. It involves an integration of planning at the central government level with planning at the regional, state and municipal level, integration of physical planning with economic planning, and some degree of coordination of public and private investment plans. Realistic appraisals of long-run prospects for the balance

of payments, the fiscal and monetary budgets, levels and distribution of income, structure of employment and product-mix, location of industry, geographic distribution of the labour force, the cost-price structure, etc. are also required.

The Secretariat of the Minister Extraordinary for Planning and Coordination is a new creation of the Brazilian Government. The Minister does not have at his disposal a well-staffed and long established Ministry to carry out the extremely wide range of responsibilities which have been assigned to him and his small organization. It is clear that the tasks described above cannot be satisfactorily accomplished within the budget presently available to the Minister. This fact is already recognized by the Brazilian and U.S. Governments in Project Agreement n. 512-11-990-122 providing for the provision through AID auspices of a number of foreign economists to work with the Office of Applied Economic Research of the Ministry.

Further Staff for EPEA

As determined at the end of 1964, the needs of the Brazilian Government for foreign staff includes the following types of expert services:

1. General Economic Development

To coordinate the work of the foreign team, in collaboration with the EPEA staff and the appropriate agencies of the Brazilian Government, into a general analysis of Brazilian economic problems; to make proposals for short-run and long-run economic policies, plans and programs, including an immediate Action Programme, a perspective plan and a series of implementation programmes.

2. Fiscal and Monetary Policy

To review the Brazilian tax system, the level and pattern of public expenditures, and the monetary and banking system, with special reference to the financing of investment in plant and equipment; and to make proposals for the reform of the monetary, banking, foreign exchange and fiscal systems in relation to the requirements of the perspective plan and the implementation programmes.

3. Industrial Development

To analyse the causes and cures of excess capacity in Brazilian industries, and particularly in the capital goods industry; to study the problems involved in the lack of coordination in general, including the steel industry, and prepare a program for expansion of output of various strategic products, including steel, in the light of the requirements implicit in the overall development programmes; and to assist in general with the industrial sector of development plans and programmes.

4. Agricultural Development

To analyse the causes of retarded growth of the agricultural sector and the lack of technological progress in agriculture; to make recommendations for increasing agricultural productivity and for creating improved markets, domestic and foreign, for Brazilian farm products; to consider problems of agrarian reorganization, migration and resettlement in relation to the overall economic development programme; and to assist in general with the agricultural sector of development plans and programmes.

5. Economics of Transport

To analyse the structure of the Brazilian transport system, with special reference to shipping; to identify the causes of inefficiency of transport services and for the high operating costs; to study problems of financing the restructuring of the transport system; to analyse the impact on the balance of payments and on general economic development of improved transport; and to relate investment in transport facilities to the overall development programme.

6. Education

To study problems of education in relation to overall economic and social development; to prepare a programme for expansion and improvement of the education system (primary, secondary and higher education, adult education, technical and vocational training) in the light of the manpower requirements of the overall development programme, particularly in relation to industrialization; and to recommend reforms in the educational system to enable it to meet better the need for skills at all levels during the next phase of Brazilian development.

7. Public Health & Social Security

No request has been made to date for a specialized expert in the economics of public health and social security. It is hoped, however, that some work can be done within EPEA on programming these sectors in relation to overall economic development.

8. Export Promotion and Policy

To analyse and propose methods for making Brazilian exports competitive in world markets, particularly manufactured goods; to analyse and advise on the potential impact of LAFTA on the pattern of Brazilian foreign trade; to analyse and make recommendations on the impact of current foreign exchange, credit, and tax policies on the level and pattern of exports; to study problems of financing exports; and to review the experiences of countries that have successfully pursued policies of export promotion, such as Germany and Japan.

9. Economic Statistics

To review the sources, scope, quality, processing and presentation of Brazilian statistics, from the point of view of requirements for planning and programming economic development; to recommend improvements in the organization of the statistical services; and to appraise the accuracy and suggest any necessary modifications of statistics related to regional and national income, cost of living, wages, balance of payments, internal migration and urban growth.

10. City Planning and Housing

To integrate city planning and housing programmes, and other aspects of land use planning at the state, local and regional level, with overall economic development planning and programming.

11. Regional Planning

To review the organization of regional planning agencies and the plans produced by them; to analyse the methods used, and the scope of operations in terms of the integration of regional plans with each other and with the national plan; to analyse interactions among regional economies and between them and the national economy; to suggest improvements in the scope, technique and organization of regional planning, to make them better able to meet national and regional development requirements; to conduct studies designed to assure consistency of regional plans with each other and with the national plan; to endeavour to determine the pattern of development in each region that will have the most favourable impact possible on growth in other regions and in the national economy as a whole.

12. Mineral Resources

To analyse mineral resources and requirements in relation to the overall development programme and to the balance of payments; to study the potential expansion of production of minerals which are now known to exist or which may exist in Brazil.

13. Tourism

To analyse the employment potential of expansion of the tourist industry in coordination with other Latin American countries.

14. General Economic Development Programming

To apply linear programming, input-output analysis, and other econometric techniques to the problem of general economic stabilization and development of Brazil, and to specific problems in the fields of education, transport, foreign trade, steel production, agriculture, etc. Some experts may perform more than one function but a total

of at least ten foreign experts is envisaged.

In order that these foreign experts may perform their functions effectively, they need counterpart personnel within the EPEA office. Each foreign expert should have one senior associate and one research associate working in the same field. USAID has offered to finance 6 to 8 experts through a contract with an American University. The French Government has indicated willingness to provide up to four experts. OECD is considering the provision of an education programmer. The Canadian and Dutch Ambassadors have expressed their willingness to investigate the possibility that their governments may provide one or two experts. The problem is to attract qualified people rather than to obtain financial support.

Other Organizations

Even with complete staffing of EPEA (say, 10 foreign experts together with 10 senior Brazilian economists and 10 Brazilian Research Associates with supporting staff), it is clearly impossible for EPEA alone to undertake the entire task of short-run programming, progress reporting, and preparation of long-run perspective plans. By way of comparison, it might be pointed out that the Indian Planning Commission has a professional staff of several hundred; the Perspective Planning Division alone has 25 people at the professional level. EPEA will undertake the integration of sectoral analysis with national development planning in the fields of agriculture, land-use (physical) planning, housing, transport, education, industrial development, regional development and export promotion. The responsibilities of EPEA will be mainly coordination and integration of the micro-economic, engineering and technical work done elsewhere, together with the macro-economic analysis involved in planning and programming, because of their special importance for the micro-economic picture and the substantial role played by these sectors in the overall development plan. However, much of the basic research on which the work of the EPEA team will depend must be done elsewhere.

Agriculture

A small unit to work on agricultural development has been established within EPEA, concerned particularly with the role of agricultural improvement in national economic development. In addition, the Agricultural Working Party in the Ministry will continue to maintain contact with the Ministry of Agriculture. However, fundamental and large scale agricultural research programs are needed in this field. The Fundação Getúlio Vargas has made an excellent start along these lines. The Institute of Agronomy at Campinas and other organizations can also undertake specialized research.

Transport

EPEA has already recruited a transport economist, and it is hoped that Brazilian counterparts can be provided for him. The Ministry of Planning has a unit working on transportation problems, and the World Bank team included 6 transportation experts. The problem of transport is so enormous, however, and the need for field research over the entire country so apparent, that there is an obvious need for specialized research projects on particular aspects of transportation. Research organizations, universities, State and Regional Planning Authorities could be used for this purpose.

Telecommunications

The same arguments apply to telecommunications. The Fundação Delmiro Gouvêia has made a start in this field. Some alternative may prove to be preferable after further study.

Education

It is becoming clear that the inadequacy of the educational system is in all likelihood the most serious bottleneck in the long-run development on the Brazilian economy. It is planned to attach an education programmer to EPEA and to provide him with counterpart personnel. The Ministry of Planning has a unit working on education in collaboration with the Ministry of Education. Here again, however, both the substantive and geographic scope of the program are so enormous that particular research projects in the field of education will have to be allotted to other research organizations. A grant through the Ministry of Education to INEP, to add some research on economics of education might be desirable. Research units might be organized in leading universities throughout the country to study the problems of particular states or regions. Education programming units might be added to State and Regional Planning Agencies.

Public Health and Social Security

The concept of programming public health and social security expenditures as an integral part of an overall development program is even newer than the "economics of education". However, considering the importance of the demographic factor in Brazilian development and the scope of welfare services, it is clear that a start must be made on fundamental research in these fields. It is hoped that this research could be organized and co-ordinated by the social development programmer in the EPEA office. However, it is clear that some basic research in these fields must be done elsewhere. The social development unit in the Ministry of Planning, and the Ministry of Health itself, can of course undertake some of the research, but in addition special studies relating to conditions in particular regions or social groups in the country might be undertaken by other

organizations. Once again, the universities and State Planning Commissions might be in a position to organize special research projects, on a contract basis.

City Planning and Housing

Hitherto the city planning in Brazil has proceeded largely independently of national development planning, with strong emphasis on the design aspects of planning. In view of the rapidity of urban growth and the importance of internal migration in the process of national economic development, this approach can no longer be considered satisfactory. City planning must be integrated with national policy regarding location of industry. Also, the Government's Action Programme treats the related field of housing as a part of macro-economic policy. The housing needs are apparent, and residential construction is a field which affords particularly favorable opportunities for employment creation in urban areas. It is not yet certain that the recent housing legislation will be adequate to assure that both the economic and social goals in the housing field will be attained. It may be that a system of subsidized low-rent housing, administered through local housing authorities, will prove to be a necessary supplement to efforts of private enterprise, as has been the case in other countries in a similar phase of urban development. In any case, there is clearly need for extensive and intensive research in these fields.

The nucleus of a city and regional planning unit has been established in EPEA. The social development unit in the Ministry will maintain contact with the relevant Ministries and Agencies. However, because of the widely varying economic and social conditions from one part of the country to another, much of this research must be decentralized. The State Planning Commissions and the Universities are possible vehicles for an extended research in these fields. Detailed projects will follow.

Regional Development

Wide regional discrepancies in productivity and incomes are a major characteristic of the Brazilian economy. Indeed, if the lagging regions are areas in which some 50% of the Brazilian population lives were raised to the levels of productivity of the more advanced regions, Brazil would quickly emerge from the category of underdeveloped countries. The recognition of this fact has been expressed in the creation of a host of state and regional planning agencies. However, these agencies differ enormously in size, quality, and functions. They have grown up in ad hoc, almost haphazard fashion, in response to the emergence of and public concern with particular localized problems. They range from SUDENE with a professional staff of several dozen and responsibility for development of nine states, to small part-time, unpaid staffs in the smaller and poorer states. The various organizations work in virtual isolation from

each other and with only limited contact with the planning agencies of the central government. Yet the nation is the sum of its parts; in terms of investment, land-use and allocation of manpower the national plan should be an aggregation of state, local and regional plans. Moreover, plans at all levels should be designed to maximize inter-regional "spread effects" and minimize "back-wash effects".

Responsibility for general supervision of regional planning has been assigned to the Minister of the Interior. The Minister of Planning, however, has responsibility for integrating regional and national plans. For this purpose a small regional planning unit is needed in EPEA, with a liberal travel budget.

Tourism

Other Latin American countries such as Mexico have developed their tourist industries into a significant source of foreign exchange. Considering the attractions Brazil has to offer, there seems to be no reason why Brazil should not be able to do the same, provided tourism in Brazil is linked with tourism in other parts of Latin America. A start has been made within EPEA on research along these lines. The Fundação Delmiro Gouvêia might do work in this field under contract to the Ministry, or some other research organization might be found or established.

Export Promotion

Efforts are being made to recruit for the EPEA team an economist with special knowledge and experience in the field of international trade and export promotion. However, the range of knowledge that is necessary as a basis for policy formation in this field, covering as it does a wide variety of commodities and a large number of markets, requires considerable decentralization of research. A start has been made by the Delmiro Gouvêia Foundation on contract with the Ministry of Planning. It is desired to extend and enlarge this contract. It may also be desirable to make contracts for studies of particular conditions and regions with more specialized groups than the Delmiro Gouvêia Foundation. For example, the Federation of Industry may assume responsibility for research on major exports (actual or potential) from the São Paulo area; the Regional Institute of Economic Development at the University of Ceará may undertake research on exports through Fortaleza; etc.

Industrial Development

The field of industrial development is particularly complex. The broad macro-economic aspects of the subject can be handled within EPEA; the intensive research on individual industries must be divided among specialists in these industries. Some of the work might be done on contract by the Delmiro Gouvêia Foundation. The Federação das Indústrias de São Paulo might assume responsibility for research in the São Paulo area. In some regions, suitable university groups might be found to conduct research on local industrial problems and potential.

Statistics

At present the statistical services are quite inadequate for a professionally efficient job of development planning to be undertaken. A "crash programme" to bring rapid improvement in the quality and quantity of data available is necessary.

EPEA has recruited a general development economist with special interest and experience in evaluation of statistics in underdeveloped countries. Here again, however, the problem is so broad in its geographic and substantive scope that considerable division of labour will be necessary to solve it. For the time being, at least, the Fundação Getúlio Vargas will presumably have responsibility for the national accounts and a cost of living index. It would be desirable for the Foundation to assume some responsibilities for basic research on Brazilian statistical problems, in addition to its current responsibilities for collecting, processing and publishing statistics. A thorough review of the methods of gathering, processing and publishing statistics, by federal, state and local governments, regional authorities and private organizations should be undertaken.

A P P E N D I X I

Proposed Research Program for the Instituto Brasileiro de Economia

I. Agriculture

As part of its program of work for 1965, the Instituto Brasileiro de Economia of the Fundação Getúlio Vargas hopes to expand its present Center of Agricultural Studies, raising it to the rank of a Department of Rural Economics. In this event it will be composed of a series of Centers devoted to specific research of various aspects of rural economics. Initially the Department will comprise the Agricultural Production Study Center, the Agricultural Market Analysis Center and the Agricultural Indices Elaboration Center. The new Department will also publish a Journal equivalent to "Conjuntura Econômica" but focusing specifically on the examination of short-term trends in agriculture.

The Agricultural Production Study Center will aim its activities, as far as possible, at the following forms of research:

- a) Cost functions and supply functions determined from a sample of agricultural establishments, a group of which would be used covering the chief production regions of the country.
- b) Division of the country into agricultural economic regions from information gathered at the Agricultural Census of 1960 on the basis of prevailing farming systems.
- c) Surveys of economic and technical conditions in selected farmings units, by means of account records compiled for several years (the units used will be chosen among those that keep regular accounts).

The Agricultural Market Analysis Center will focus its attention on the following points:

- a) Comparative study of the main regional markets of the country in respect to prices and marketing process of agricultural produce essential for food consumption.
- b) Study of the organization and operation of urban markets to ascertain their degree of efficiency.
- c) Systematic analysis of agricultural product prices on the basis of statistics of prices

regularly published in the country, including the different levels of marketing, in the internal and export sectors.

The Agricultural Indices Elaboration Center will construct regional and national indices which, initially will abstract the time-variation of the following phenomena:

- a) Area of cultivation, yield, physical productivity, fertilizer supply and implement production, as to indices of physical quantity.
- b) Salaries paid, prices received and prices paid by farmers, monetary productivity, net income and cost of living — as to indices expressed in money values.

The activity of these three Centers will supply the basic material for permanent sections in the Journal devoted to publication of analysis reports on the conjuncture. This new publication would complement the role that is currently played by "Conjuntura Econômica" in the field of economic information and will fill a gap in the agricultural literature in the country.

As the "Instituto Brasileiro de Economia" is facing certain financial strictures, it is evident that the promptness of implementation of services planned for the Department of Rural Economics is dependent upon the financial means effectively available. In the proposed budget the Instituto Brasileiro de Economia will submit in November to the Board of Directors of the Fundação Getúlio Vargas, the cost of services to be rendered by the Department of Rural Economics is estimated at Cr\$ 140 million.

As the different Institutes that make up the Fundação Getúlio Vargas are competitive in obtaining the financial means supplied by the sole source (the Fundação will divide its global resources among the Institutes in order to cover the operational deficits approved for them), there is no guarantee that, in the course of 1965, the Department of Rural Economics will grow according to Plan.

The Fundação Getúlio Vargas adopts the technique of a programme budget, and as such there will always be the risk of adopting gradual growth, unfolding the total expansion in pluriannual periods. Thus, the granting of extra budget funds would assure the implementation of these services in the course of 1965.

Over two years the cost of production of these centers — at salaries and prices used in the preparation of the proposal of the Instituto Brasileiro de Economia — would be as follows:

<u>Agricultural Production Study Center</u>	<u>In millions of Cr\$</u>
Personnel	26.0
Office supplies	0.8
Furniture and fixtures	4.0
Other services	5.0
Sundry expenses	<u>3.0</u>
	38.8
 <u>Agricultural Indices Elaboration Center</u>	
Personnel	22.0
Office supplies	0.8
Furniture and fixtures	6.0
Other services	5.0
Sundry expenses	<u>4.0</u>
	37.8

II. National Accounts

The National Accounts Center of this Institute is responsible for the preparation of National Product and Income Statistics, as well as correlated totals for Brazil. In addition to the routine work involved in the computation of those figures, the Brazilian Institute of Economics of the Getulio Vargas Foundation would like to conduct the following studies, to be executed by the National Accounts Center in 1965:

1) Regional Product & Income

- a) Estimate of real product by sector of economic activity and by State.
- b) Estimate of product by sectoral composition and zone distribution for each State.

In view of the differences in structure and in degree of development which exist between the various regions of the country, these data are considered to be of the utmost importance for planning at the regional and national levels.

2) National Product and Foreign Trade

Coding and classification of information on national production, imports and exports for the period 1920/1963, both in physical quantities and in dollar value.

This project, which will become routine work for the Center, is necessary in order to obtain an adequate knowledge of the changes which have been observed in foreign trade, of the extent of the process of import substitution, and therefore of the relationship between entry and exit of goods and national production.