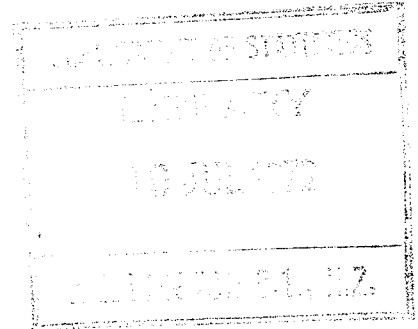


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TWENTY-SECOND ANNUAL CONFERENCE

Preliminary notice is given that the 1971 Annual Conference of the Association, in conjunction with the Operational Research Society of New Zealand, will be held in the Shell Theatre, The Terrace, Wellington on the three days 29-30 June and 1 July 1971.

The committee is currently drawing up the programme of papers to be presented and full details are not yet available. However, the following four papers will be presented over the first two-days of the conference:

“1971 Census of Population and Dwellings” by A.A. Teague;

“Problems of Short-term Economic Forecasting in New Zealand”
by W.D. Rose;

“Follow-up Survey of New Zealand Technical Certificate Holders”
by H. Offenberger;

“Accidents in Mines” by I.D. Dick.

The full programme, together with abstracts of each paper will be published in the next issue of New Zealand Statistician.

The balance of this issue is devoted to a paper by Stephen Kuzmicich, an Assistant Government Statistician, on some major extensions to official statistical services which are being planned at present.

**RECENT DEVELOPMENTS IN THE DEPARTMENT OF STATISTICS
AND THE RELATIONSHIP WITH INDICATIVE PLANNING**

by: Stephen Kuzmicich

INTRODUCTION: This paper aims to set out in summary form the background to and the nature of the recent developments in the official statistical system in New Zealand and, more particularly, in the work and organisation of the Department of Statistics. While Association members whose professional work is in the field of economic statistics will be familiar with these developments, it is considered that members generally will be interested in the wider implications of recent changes. Without doubt there has been a significant improvement in the degree of recognition accorded statisticians in the economic and social fields and the importance of their contribution to the information system needed for rational community decision-making. The demand for a more comprehensive range of statistical services has also led to a fuller understanding of the explicit information services role of the Department of Statistics and the other statistical sections within central government.

INDICATIVE PLANNING IN NEW ZEALAND: The statistical developments which are occurring have emerged out of the introduction of "indicative planning" in New Zealand in 1968. In essence, such planning can be described as the formulation of and striving for planning targets after an extensive process of consultation and study by interested groups in the community. Currently this takes place within the organisational framework of the main National Development Council and its associated sector development councils.

In 1968 Government decided to convene a National Development Conference with varied representation, in an individual (not official) capacity, of top management in the various industrial sectors, of experts in economic and social matters, and of national organisations playing a role in community affairs. This conference was organised on both a plenary and sector basis and following a second session in 1969 specific economic growth targets were adopted for the coming decade. The conference also made an extensive set of recommendations on economic and social matters having a direct or indirect relationship to the achievement of the planning targets.

The targets adopted were in no sense intended as mandatory in regulating economic and social decision-making, but the community-wide representation at the National Development Conference and the consensus reached has resulted in widespread acceptance of the targets. Central government, while of course retaining the right to make final decisions on economic and social policy, has, because of its association and involvement in the setting of the indicative planning targets, used the targets and the associated conference recommendations as a basis for much of its policy-making.

A permanent machinery, comprising a central National Development Council and fifteen supporting sector councils, has been established subsequently to review progress in achieving the adopted community targets and to carry out studies to formulate policies to be recommended to government as desirable for planning purposes.

Indicative planning, therefore, as it has emerged in New Zealand, is a process of formulating acceptable, feasible, national growth targets and the setting of optimum policies for their achievement. Initially, emphasis was on the more strictly economic aspects of community development, but a more balanced approach, with considerable attention to social and cultural factors, has since been achieved.

ROLE OF THE CENTRAL STATISTICAL OFFICE: Indicative planning, if it is to be carried out in a rational and effective way, requires a comprehensive quantitative information system, with statistical information services playing a vital role in this system. This does not overlook the non-quantitative "quality-of-life" elements in the full realisation of the community's planning aims, but reflects the need to approach indicative planning in a managerially scientific way.

Before consideration can be given to economic and social targets it is essential to have available a comprehensive statistical description of the current state of the community at both the macro and micro levels and the projected future state of the community over the proposed planning period. In regard to economic targets such a statistical analysis needs to be in terms of an integrated set of statistics relating to the major economic aggregates, such as the total volume and value of the production of goods and services, the level of aggregate consumption of such goods and services, capital formation and the volume and net balance of trading with other countries.

This indicates the central importance of national economic accounts statistics which provide the basis for the required statistical description for economic planning. An analysis of the economy's current and unplanned future situation in terms of national accounting concepts, when assessed in terms of normative aspirations of the community for an acceptable rate of sound economic growth, provides a basis for the quantification of possible planning targets.

Before these targets can be adopted as feasible, however the implications of the macro-economic targets, which are expressed in terms of "gross national product", "consumption", "balance of external payments", and other economic variables, need to be explored to see whether their achievement is possible allowing for the economic and technological structural relationships existing within the economy which act as a constraint on possible re-direction of economic effort. These more detailed and sophisticated studies, again, have to be done in quantitative statistical terms. In addition, for these studies to be effective, a further extension of national accounting statistics is required by way of inter-industry input-output tables. These essentially analyse for a period the structural relationships between the various sectors in the economy and usually take the basic form of a set of accounts in matrix form which set out the transactions in current values which take place between all industries and the "final demand" categories such as "household consumption", "capital formation", "exports" and so on.

Once the tentative targets are confirmed by means of an inter-industry input-output study as being feasible in terms of the requirements for imports, full utilisation of the available labour force, and so on, they can be firmly adopted as rational, acceptable targets. Exploratory investigation into optimum economic policies to assist industry in reaching the target production levels is not solely a quantitative process, but statistically-based studies involving a wide range of national accounting and other statistics are necessary.

A similar sort of process, *mutatis mutandis*, is ideally needed in dealing with social targets, but the conceptual and methodological basis for the statistical treatment have yet to be fully developed. Incidentally, some promising work on demographically-oriented social accounts is currently being done overseas, which if brought to fruition will go a long way to providing the required bases.

The final stage of the indicative planning process is the measurement of the actual performance of the community under the various policies and decisions taken. Again, this has to be mainly in quantitative statistical terms, and for economic targets the continuing national accounts statistics, when related to the targets formulated in the same concepts, make this possible. This continuing statistical comparison of aspiration and performance then indicates whether planning policy and strategy is proving effective or is in need of modification.

STATISTICS FOR PLANNING PURPOSES: If indicative planning is to be carried out effectively, there is an obvious need for a comprehensive, integrated set of national economic accounts, including input-output tables, and other economic and social statistics. While significant extensions to official statistics have been made by the Department of Statistics and other agencies over the last twenty years, it is now recognised that the resources allocated in the past have been insufficient to meet the more sophisticated needs of indicative planning.

Indicative planning, if successful, must be a community-wide exercise. It involves all sections of the community, with decision-making responsibilities at all levels. All need an adequate information system, in its widest sense, if indicative planning decision-making is to be well-directed. Statistics are a vital part of this information system. The statistical element needs to be relevant to the area of responsibility of the decision-maker and in many cases will therefore comprise detailed micro statistics not within the national accounting field, or macro-social field. Planning thus involves all facets of official economic and social statistics, as well as the key national accounting statistics. If well-informed planning policies are formulated by the National Development Council, but decisions at a lower decentralised level are made on the basis of inadequate information, then the central policies could be nullified. So far as economic statistics are concerned the further development of statistics outside the national accounting field is therefore necessary to supplement the successful use of the improved national accounting statistics for indicative planning.

ADEQUACY OF NEW ZEALAND'S OFFICIAL STATISTICAL SYSTEM: As a result of the increased awareness of the demanding requirements for indicative planning purposes and the inability of the existing official system, both in terms of available resources and the range and nature of statistics available, to fully meet these requirements, the National Development Conference recommended that a review be carried out to determine explicitly the changes in statistical services needed. Accordingly the Minister in Charge of the Department of Statistics, the Hon. R.D. Muldoon, appointed the Technical Committee on Statistics in May 1969 with the following terms of reference:

In order to provide adequate statistics for the indicative planning proposals of the National Development Conference, the Technical Committee of Statistics be required to:

- (a) Assess the statistical requirements resulting from the continuation of indicative planning work after the National Development Conference;*
- (b) Examine the statistics which are at present available and consider what changes are needed;*
- (c) Indicate –*
 - (i) How such changes would be implemented;*
 - (ii) The desirable allocation of work; and*
 - (iii) The resources required;*
- (d) Report on the foregoing matters to the National Development Council.*

The Technical Committee comprised nine members, including the Government Statistician who was Chairman, and was serviced by a number of specialist sub-committees on national accounting, classifications, capital formation and systems of regional statistics. The membership of the committee was: Messrs J.V.T. Baker (chairman up to 31 July 1969), J.P. Lewin (chairman from 1 August 1969), E.G.A. Frost, Professor L.F. Jackson, Messrs J. Kominik (up to 18 September 1969), S. Kuzmicich (from 11 August 1969), J.P. McFaul, L.C. Nielson and J.W. Rowe.

The committee issued its report in November 1969.*

**Report of the Technical Committee on Statistics to the National Development Conference, October 1969 (N.D.C. 20).*

Seventy-one recommendations were made covering all aspects of a much improved official statistical system that was proposed. The main features of the report recommendations were as follows:

- (1) A modernised and extended system of national accounts and inter-industry studies be introduced, patterned on the United Nations System of National Accounts, as the key to the economic statistical requirements of indicative planning.
- (2) Quarterly summaries of the national accounts are necessary as a tool for short-term economic management.
- (3) Periodic surveys of household incomes, expenditures and savings be conducted for national accounting and social policy formation purposes.
- (4) A variety of new or extended statistical services be introduced, including the establishment of a central computerised file of both aggregated and unaggregated statistical data suitably classified so as to permit cross survey linkage; the development of formal liaison machinery between the Department of Statistics, the permanent National Development Council and the suppliers and users of statistics; and the further development of statistical projections.
- (5) In view of the need for improved regional statistics, that a fine mesh-block system be introduced as a basis for common regional referencing of statistical data in all subject areas.
- (6) That the various recommendations be implemented in two stages, the first before and the second after the end of 1971.
- (7) An investigation by the State Services Commission, the Government Statistician and other departments concerned should be carried out to determine the scope for the further centralisation, better co-ordination, and more economical conduct of official statistical work.
- (8) Statistics currently prepared should, in collaboration with users and suppliers, be periodically reviewed and, where indicated, discontinued or modified.

The full list of recommendations for first-stage developments is shown in the appendix to this paper. Members should consult the Technical Committee's report for details of the full list of all recommendations and their justification.

IMPLEMENTATION OF THE TECHNICAL COMMITTEE'S RECOMMENDATIONS: The Technical Committee's report was without a doubt the most significant document in the history of official statistics in New Zealand and has been accorded wide acceptance. After adoption in principle by the National Development Council it was referred to Government for its consideration. With Government approval being given to the implementation of the Technical Committee recommendations, negotiations have proceeded concerning the allocation of the required additional resources.

In 1970 approval was given to an effective 18 percent increase in the staff size of the Department of Statistics, together with an improved salary structure. The staff increase is not the total required for the achievement of all the recommendations of the Technical Committee, but represents the requirement for the essential first-priority developments. Progress with the recruitment of staff for this development programme has been somewhat slower than hoped for, for reasons outside of the department's control, but currently it is expected that during 1971 significant progress will be possible with the priority developments.

The key project of the establishment of a central register of all economic enterprises is already at the development stage. This will serve as the basis for the integration of surveys in different subject-matter fields, with consistency in classifications and coverage. The lack of integration is a major defect in current economic statistics. The national accounting developments are heavily dependent on this integration of surveys for data purposes. Demographic developments, especially in the field of projections, have also been acted upon, but work on most recommendations is only now commencing.

In spite of these delays the impetus given by the adoption of the Technical Committee's report to the official statistical system in New Zealand has not been lost and the indications are that in the space of a few years the community will have available a much fuller understanding of its economic and social performance as a result of developments now under way. The relative improvements in the grading status of official statisticians should also help to improve the attractiveness of entering into this work area for graduates and school-leavers, with indirect enhancement to the professional status of statisticians generally.

LIAISON MACHINERY WITH THE NATIONAL DEVELOPMENT COUNCILS: Considerable importance attaches to the institution of adequate liaison arrangements with the formal planning bodies if full advantage is to be gained from the improved statistical services which are to be introduced and a brief comment on this matter will be made to conclude this paper.

The general role of the statistical system in indicative planning outlined earlier requires the independence of the statistical system from the planning machinery if statisticians are not to appear to become committed to planning targets to some degree. Any such commitment, of course, could compromise their role as providers of objective data on which planning must rest and on which assessment of the success or failure of planning exercises depends.

In New Zealand the liaison machinery which has been developed avoids direct statistical representation on the main National Development Council or supporting sector development councils. The Government Statistician, however, is available to provide statistical assistance at this level when required. Both the central and sector development councils have supporting targets advisory and/or statistics committees on which the Department of Statistics is represented. Objective statistical data are made available at the more detailed working level of planning studies and reviews under this arrangement. While no limits are placed on the extent to which statistical analytical and interpretive services by departmental liaison representatives can extend, the formal liaison arrangements expressly prohibit the Department of Statistics representatives advocating views of a normative character either on desirable targets or planning strategy.

February 1971.

APPENDIX

FIRST-STAGE RECOMMENDATIONS OF THE N.D.C. TECHNICAL COMMITTEE ON STATISTICS

National Accounting

- *1 That a revised and more detailed system of New Zealand national accounts be prepared, based on the United Nations *System of National Accounts* 1968, and including both annual and quarterly accounts, this work to commence immediately and the statistics to be developed in stages.
- *2 That the annual national accounts be available within 6 months, and the proposed quarterly accounts within 3 months, of the end of the accounting period.
- *3 That the recommended new system of national accounts be introduced from 1971-72, with the present system being continued to that date and that, in order to provide a link between the present and recommended new systems of national accounts, the aggregates included in the consolidated accounts of the nation be prepared for 1954-55, 1959-60, and 1965-66 to 1970-71.
- *4 That the Department of Statistics integrate, as far as possible and as soon as possible, all statistics of economic activity whether for national accounts or other purposes, by means of nation-wide enterprise inquiries rather than the existing individual surveys.
- *5 That a central register of all economic enterprises, including non-corporate businesses, be established and maintained by the Department of Statistics.

Inter-industry Studies

- *7 That the Department of Statistics undertake the preparation of inter-industry studies once every 3 years, as currently approved, commencing from the first study which can be made following the 1965-66 study currently in preparation and that an endeavour be made to complete these studies as quickly as possible.

Statistical Projections

- *8 That further efforts be made to reduce the time-lag in preparation of statistical series showing the current state of the economy and trends therein. These efforts should be aimed at speeding up response in statistical surveys and at obtaining early estimates of economic changes.
- *9 That more detailed demographic projections of population, labour force, and households be made, including regional age-sex projections of population and labour force.

Household Surveys

- *11 That, as a first-stage priority, the Department of Statistics conducts a national household budget survey to provide the needed statistics for national accounting and related purposes, and such other statistics as a review of the needs of Government and other users shows to be justified.

Regional Statistics

- *16 That, where appropriate, the mesh-block system of geographical reference be adopted from 1971 for all central statistical activities and its use by other agencies be progressively extended.
- *17 That the Department of Statistics, in association with the Department of Lands and Survey, organise the production of mesh-block plans and make these available to appropriate agencies.
- *19 That the Department of Lands and Survey provide co-ordinate data for mesh-block central points for use with the 1971 census of population and dwellings, thus permitting new types of analysis and the development of expertise in computer processing of data referenced in this way.

Statistical Information Centre

- *21 That the Department of Statistics establish a computerised statistical information centre in New Zealand which will act as a repository for un-aggregated and aggregated economic and social statistics, as a second-stage priority development; the centre to store only data obtained from statistical surveys and exercise and to permit access to the data only for statistical purposes and in accordance with the strict provisions of the Statistics Act 1955 regarding the maintenance of the confidentiality of supplied detail. (Not a first-stage recommendation, but of necessity development work has had to start early.)

Standard Statistical Reference Year

- *22 That the National Development Council endorse the need for a standardised statistical reference year for official statistics and take the initiative in sponsoring a detailed study of the various problems involved.
- *23 That the Department of Statistics, in consultation with the Department of Agriculture and the Agricultural Production Council, give consideration to the possibility of changing the date of the annual survey of farm production from 31 January to 30 June and to improving the time-period comparability of other collections of agricultural statistics.

Administration and Allocation of Responsibilities

- *24 That the State Services Commission, the Government Statistician, and the other Government departments and agencies concerned, proceed with investigations into the scope for the further centralisation of statistics within the Department of Statistics.
- *25 That proposals for the further development of statistical units in Government departments and agencies be considered in light of the investigations contemplated by the preceding recommendation.
- *26 That the Department of Statistics be responsible for preparing standard statistical classifications of economic and social activities and that the department in so doing consult with affected organisations, and as far as possible conform classifications to the United Nations' standards.
- *27 That the State Services Commission, the Government Statistician, and other Government departments and agencies concerned, investigate the scope for the centralised examination of measures which involve the completion of forms by the public and of the forms themselves.
- *30 That the National Development Council and the Government Statistician consult on liaison arrangements between the various Development Councils and the Department of Statistics, to ensure that statistical requirements for indicative planning are effectively met.

Resources and Priorities

- *31 That, as soon as a decision is made by Government on the statistical developments proposed by the Committee, an appraisal of the classes and levels of skill of the extra staff required and their distribution be commenced by the State Services Commission, the Department of Statistics and other Government departments concerned.

- *32 That the justification of all existing statistical surveys be continually reviewed by those concerned and that this also receive attention at the conferences proposed in recommendation 29.
- *33 That the State Services Commission, the Department of Statistics, other Government departments concerned, and the academic institutions investigate the scope for extending and developing the facilities for the training of statisticians.

Agriculture

- *34 That consultation take place between the Department of Statistics, the Department of Agriculture, the producer boards, and the Agricultural Production Council to implement N.D.C. recommendation 457, seeking to improve the collection of agricultural production statistics.
- *35 That the Department of Statistics implement N.D.C. recommendation 458, by providing timely annual statistics of farm employment, ruling rates of remuneration, and unfilled vacancies by means of the most suitable survey arrangement.
- *37 That steps be taken to reduce to a minimum the demands on farmers for similar data from different organisations.
- *39 That the Department of Statistics implement the Agricultural Production Council's recommendation for the introduction of a farm inputs price index.

Forestry

- *40 That, as soon as practicable, regular comprehensive surveys of forestry and logging be commenced covering all activities of these industries.

Manufacturing

- *43 That the Department of Statistics, in conjunction with the Manufacturing Development Council and other interested parties, proceed with the planned detailed review of manufacturing statistics including an examination of:
 - (a) The range, fine classification, and aggregation of statistics in the activities covered.
 - (b) Integration with the labour surveys and with the statistical series for the national accounts, including quarterly surveys, the annual survey, and triennial input-output tables.
 - (c) Content of the questionnaires used.Appropriate steps to speed up the timeliness of release of statistics.

Building and Construction

- *44 That the Department of Statistics alter, as soon as possible, its classification "addition and alterations" in building permit statistics to exclude new buildings on sites where other buildings already exist.
- *48 That the Department of Statistics develop its volume of production indexes for the building and construction group of the index of production, and also the subgroup indexes, to allow the preparation of these on a quarterly moving basis, as done for the manufacturing group.

Fuel and Power

- *50 That the Department of Statistics consult with interest parties with the aim of co-ordinating fuel and power statistics and making their classification as detailed as is needed for their effective use.

Distribution

- *55 That the Department of Statistics extend where possible the coverage of the regular short-term surveys of distribution.

Overseas Trade

- *57 That the Department of Statistics prepare regular analyses classifying f.o.b. exports according to National Development Council industry groupings.

Tourism

- *60 That the Tourist Development Council, the Tourist and Publicity Department, and the Department of Statistics jointly consider the extended use of sample surveys to determine visitor expenditure and the itineraries of overseas tourists related to country of origin.

Finance

- *61 That all existing and future series of financial statistics adopt classification systems consistent with the industry, institutional sector, and asset-type classifications adopted for the national accounts.
- *64 That information on household wealth, debt, and transactions in financial assets be collected as part of the proposed sample survey of households.

Labour

- *65 That the classification of industries and occupations used in all official employment and earnings surveys be consistent with the International Standard Industrial Classification and the International Standard Classifications of Occupations, respectively, as adapted to suit New Zealand conditions by the Department of Statistics.
- *66 That the Departments of Labour, Education, and Statistics, in conjunction with the State Services Commission, review the division of statistical work in the field of labour and employment with a view to achieving a greater measure of rationalisation than at present.
- *67 That continuing surveys be undertaken to ascertain the current and future requirements, of persons with various degrees of educational attainment or skills in the labour force, and of those who need special training for upgrading of skills, or need retraining resulting from technological change or arising out of re-entrance into the labour force. Supplementing the surveys should be suitable projections of the number of persons in each category to gauge what imbalances have to be overcome by planning measures.

Productivity and Prices

- *71 That the export price indexes be extended to provide, where possible, for separate commodity indexes corresponding to N.D.C. industry groupings.