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ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC

REPORT OF THE PACIFIC SEMINAR ON THE REVISION
OF THE SYSTEM OF NATIONAL ACCOUNTS

Suva, 29 August-7 September 1990
ORGANIZATION OF THE SEMINAR

1. The Pacific Seminar on the Revision of the System of National Accounts, organized by the secretariat of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), was held in association with the Bureau of Statistics, Fiji at Suva from 29 August to 7 September 1990. Financial assistance was provided by the Government of the Republic of Korea with supplementary funds provided by the United Nations Department of Technical Co-operation for Development, with host facilities provided by the Government of Fiji.

2. The Seminar was attended by 12 participants from 10 members and associate members of ESCAP: Australia, Cook Islands, Federated States of Micronesia, Fiji, Kiribati, New Zealand, Papua New Guinea, Republic of Palau, Tonga and Vanuatu.


4. Mr. Hari Narayan Shankar, Government Statistician, Bureau of Statistics, Fiji, welcomed participants to the Seminar. He expressed the keen interest of the Bureau in the current SNA revision and highlighted a number of issues on which he hoped the revised SNA would provide clear guidelines. Fiji was happy to host such a meeting as it brought Pacific statisticians together, and hoped that the ESCAP secretariat would be in a position to organize more subregional meetings in the future.

5. In a message read by the Chief of the Statistics Division, the Executive Secretary of ESCAP expressed his gratitude to the Government of the Republic of Korea for providing financial support for two subregional seminars on national accounts in the ESCAP region. He felt that such support augured well for technical co-operation among developing countries. He also thanked the Department of Technical Co-operation for Development for its financial support. He expressed gratitude to the Government of Fiji for generously providing host facilities for the Seminar.

6. The Executive Secretary recalled that in 1986, the secretariat had organized the Seminar on the Review and Development of National Accounts to provide a forum for national accounts experts and statisticians in the ESCAP region to discuss the issues that needed to be considered in the current SNA revision process. He was pleased to note that the report of that Seminar had been taken into account by the Inter-secretariat Working Group on National Accounts. He noted that preliminary working draft chapters of the revised SNA had been prepared, though a number of technical issues were not yet resolved. He emphasized that the current seminar thus provided an opportunity to Pacific statisticians to reflect on a number of issues relevant to Pacific island economies which had particular implications for national accounting.
7. The Executive Secretary observed that the next SNA revision would probably be many years in the future. He therefore emphasized the importance of considering contemporary social and economic issues relevant to national accounting, and catering for the analytical and policy concerns of countries at different stages of development in the current revision exercise. The Executive Secretary urged participants to bear the analytical needs and statistical capabilities of the developing countries in mind during the deliberations.

8. In his inaugural address, His Excellency the Minister of Finance and Economic Planning, Mr. Josevata Kamikamica, warmly welcomed participants to Suva. He noted that the Seminar was of particular importance as it would give the Pacific subregion an opportunity to contribute to the development process of the framework for national accounting. He noted that in providing a systematic summary of all economic transactions, national accounts supplied more information than did any other statistical series.

9. The Minister emphasized that statistics in general and national accounts in particular had to be presented on a consistent and conceptually sound basis, without which they were of dubious use. He commented that statistical work was essential in understanding the world and was a vital ingredient in sound planning. The Minister noted that the United Nations SNA was a useful manual and that like most manuals, it required constant updating. National accounting was still a developing science, and the challenge for statisticians was to ensure that the revised version of the SNA remained relevant for as long as possible.

10. The Minister noted that of the many issues to be considered by the Seminar, of special interest to him were the treatment of output relating to non-marketed products, the classification of new products and the treatment of complex business arrangements. He advised that in seeking agreement on the many difficult areas to be discussed, the Seminar should not accept short-cuts or deficiencies in standards.

11. The Seminar elected Mr. Hari Narayan Shankar (Fiji) as Chairman. Mr. Iete Rouatu (Kiribati) and Mr. Paiwa Bogela (Papua New Guinea) were elected vice-chairmen and Mr. Barry Haydon (Australia), Rapporteur.
The Seminar adopted the following agenda:

1. Opening of the Seminar.
2. Election of officers.
3. Adoption of the agenda.
5. Main concepts and classifications of the revised System of National Accounts:
   (a) Integrated analysis of production, income generation and income distribution;
   (b) Valuation of value added;
   (c) Integration of stock analysis with traditional flow analysis of the national accounts;
   (d) Financial instruments, financial sector and financial accounts;
   (e) Transfer of resources between countries;
   (f) Analysis of inflation;
   (g) Role of the household sector in the economic process;
   (h) Role of the public sector.
6. Other matters
7. Adoption of the report.

At the closing session of the Seminar, the participants expressed their gratitude to the Government of Fiji, particularly the staff of the Bureau of Statistics, for the excellent arrangements made for the Seminar and for the warm hospitality extended to them.

A list of the documents submitted to the Seminar is given in Annex I to the present report.

During discussion of the schedule of SNA issues to be taken up, some topics were added that were of special interest to the subregion. Those included the valuation of subsistence output, the treatment of expatriates' incomes, the asset boundary of the system in particular with regard to military durables, environmental assets, exchange rate conversion in particular for investments overseas, residence of offshore banks and foreign fishing vessels.
II. SNA REVIEW PROGRAMME

II.0.1 (16) In presenting the SNA Review programme to the Seminar participants, the initial objectives as defined by the 1982 SNA expert group which initiated the SNA review process were recalled: clarification and simplification, updating of concepts, and harmonization of concepts with those of other systems. A further objective had been added during the review process: that the SNA review should develop a conceptual framework that was internally consistent and applicable to as many countries as possible; the revised SNA itself would not deal with practical issues of implementation and data availability. Those would be dealt with in separate handbooks which would be developed in parallel with the revised SNA.

II.0.2 (17) Much progress had been made in the SNA Review process as a result of intensive discussions on concepts in 11 expert group meetings that had been held since 1986. In particular much had been achieved in terms of harmonization of the SNA with related systems of statistics. It was now virtually assured that the revised system, as compared with the 1968 SNA, would be more compatible with related statistical systems such as the IMF systems on BPM, GFS and MBS, the FAO Handbook on Agricultural Accounts, as well as the ISIC and CPC classifications and the industrial statistics standards issued by UNSO. All those systems and standards were being or would be revised in parallel with the revised SNA. The revised SNA would furthermore achieve compatibility with the separate UNSO guidelines on balance sheets and reconciliation accounts, income distribution statistics and household sector accounts, as well as with recommendations on tangible assets and on national accounting in constant prices which were presently contained in separate manuals but which would be consolidated with the revised SNA.

II.0.3 (18) The remaining programme of the SNA review now aimed at completion of the work in 1993, when it was planned to present a third draft of the SNA chapters to the United Nations Statistical Commission for adoption. To accomplish that, it was planned that a first complete draft of all SNA chapters, together with the comments by regional meetings such as the present one, would be reviewed by two expert group meetings in the second quarter of 1991. After revision a second draft would be discussed in an interregional workshop that was planned for early 1992. Comments from that meeting would be reflected in a third draft to be presented to the Statistical Commission in 1993.
II.0.4 (19) Prior to those steps it would be necessary to resolve a number of outstanding issues in an expert group meeting scheduled to be hosted by the World Bank in December 1990. Those outstanding issues included the coverage, classification and treatment of assets, the distinction between market and non-market producers, the treatment of multiple exchange rates and in particular of black market rates in the national accounts, the links between SNA and environmental accounts and the adaptation of the SNA to countries in transition which formerly used the MPS. Also to be developed were some further chapters and annexes on the links between SNA and GFS and BPM, the links with employment statistics standards, an annex dealing with an extended matrix presentation, and possibly annexes on the treatment of insurance transactions in the SNA and the use of the perpetual inventory method.

III. ACCOUNTING FRAMEWORK

III.0.1 (20) In introducing the accounting framework, a distinction was made between three separate elements: (a) the central framework of accounts and tables, (b) alternative presentations of the SNA in the form of adaptations of the system to special circumstances and analyses without a change in the concepts, and satellite accounts in which altered concepts were included for special analysis, and (c) accounts and tables that would link the SNA to related systems such as BPM, GFS and MBS.

III.0.2 (21) Only the central framework was presented in detail during the Seminar, while the remaining two elements of the accounting framework were presented in the course of dealing with specific issues during the discussions.

III.0.3 (22) The central framework was presented in several steps, covering the sequence of accounts, the sector accounts, the integrated accounts for the national economy, the supply and use tables and related goods and services accounts and input-output tables, a table constituting the link between the integrated accounts for the national economy and the supply and use table, and finally the classifications of transactors and transactions and assets, supporting the classifications used in the tables.

III.1 Sequence of accounts, income, savings and net worth aggregates

III.1.1 (23) The sequence of accounts was presented as the main element of the central framework in which all main concepts were defined and related to each other, i.e., the production accounts identified value added (and GDP and NDP for the economy as a whole), the generation of income account identified operating surplus, the appropriation of primary income account derived primary income (and national income for the economy as a whole), the secondary distribution of income account identified disposable income, the use of income account identified saving, the capital account identified changes in net worth, and the financial account derived net lending. The changes in net worth derived from the capital account constituted one of the elements explaining the
difference between net worth at the beginning and end of an accounting period. The other two elements were changes in net worth due to other volume changes, which were represented in the other changes in volume account, and the changes caused by value changes in assets which were represented in the revaluation accounts.

III.2 Sector accounts

III.2.1 (24) When introducing the topic, it was noted that the sequence of accounts was applied to all sectors and sub-sectors of the economy. Those included the main sectors covering non-financial corporations, financial corporations, government, households and the rest of the world. For each of those sectors, a special selection of transaction items was made that constituted the sector-specific presentations of the so-called sector accounts. While having the same basic structure, the sector-specific accounts differed in detail. For example, operating surplus was replaced by mixed income in the generation of income account of the household sector; the primary distribution of income account of the financial and non-financial corporations sectors only included property income receivable and payable; the primary distribution of income accounts of households and government included as resources, compensation of employees and taxes on production and imports respectively; transfers receivable in the secondary distribution of income accounts included social benefits in cash for households and social security contributions for government; and in the same account, social contributions were uses in the household sector and social benefits in cash were uses in the government sector.

III.3 External account

III.3.1 (25) In introducing the external accounts it was pointed out that those accounts included the counterpart items between the accounts for the national economy that related to transactions with other countries. Therefore, the external accounts had in principle the same structure as the sequence of accounts as applied to each of the domestic sectors. There were two exceptions: (i) in the external accounts the production accounts were replaced by an external account for goods and services, which included items for exports, imports and the external balance of goods and services; (ii) the remaining income accounts were merged into one account for other current external transactions. The three main balancing items of the external accounts represented the contribution of external balances to domestic aggregates: i.e. (i) the external balance of goods and services was the external contribution to GDP, (ii) the current external balance constituted the external contribution to national domestic saving, and (iii) the changes in net worth that appeared in the external account represented the net changes in (financial) claims of residents on external assets minus foreign (financial) claims on the national non-financial wealth of the country.

III.3.2 (26) The specific treatment of the sale of land between residents and non-residents was clarified in response to a
question. It was pointed out that there was no change in the revised SNA as compared with its 1968 predecessor on that point. Transactions in land between residents and non-residents would continue to be treated as financial transactions through the creation of a notional resident unit and an asset/claim relation between that unit and other resident units. If the land was later sold to a resident it would result in the elimination of the notional unit and the corresponding asset/claim relation.

III.3.3 (27) In response to a question it was explained that an uncompensated seizure of a resident subsidiary of a foreign-owned corporation would not change the liabilities of the domestic subsidiary. The counterpart of that liability, however, would change. The (financial) asset would not be held any more by a non-resident, but instead by a resident unit, i.e., the government.

III.4 Integrated accounts for the national economy

III.4.1 (28) The integrated accounts were introduced as a comprehensive presentation of the economy that was obtained as a result of merging the sector accounts for individual sectors, the national economy and the rest of the world. The integrated accounts included three types of transactions: (i) transactions for which there was a balance between uses and resources of different sectors, which included transfers, property income, and stocks and acquisitions minus incurrence of assets and liabilities; (ii) transactions for which there was no balance between sectors, which included most of the "transactions" in the accounts for other volume changes and revaluation; and (iii) goods and services transactions for which there was only an over-all balance between total supply and use. In order to reflect the latter, the integrated accounts included two separate columns for the use and resource side of a so-called goods and services account; those columns included the counterpart of all goods and services transactions.
III.5 Goods and services accounts, and supply and use table

III.5.1 (29) The goods and services columns of the integrated accounts were formally included in the goods and services account of the national economy, which covered the main aggregates of the system, i.e. output, imports, exports, final consumption and gross capital formation. As the two sides of the account were not valued in the same manner, there was an additional item which represented product taxes (in the 1968 SNA that item included only import duties). The goods and services account was the basis for the supply and use table. The latter had been developed from the goods and services account, by: (i) adding value added (and its components) and the corresponding national accounts identity between output, intermediate consumption and value added; (ii) including additional detail by CPC categories for all product flow items; (iii) incorporating ISIC detail for the three elements of output, intermediate consumption and value added, and (iv) including an additional column for trade and transport margins in order to arrive at an identity between supply and use for each of the CPC product flows.

III.5.2 (30) In response to a question it was argued that while the supply and use table as presented was meant primarily for purposes of presenting the system, it would be a very useful tool in the compilation of data for the production and income generation accounts. Instead of linking the GDP based on expenditure and income and/or production only through two sub-totals, it would be possible to arrive at supply and use confrontation of data at the level of product groups. Even though that might involve quite a few assumptions, it would create the compilation methodology for the future, and would not require changes in that methodology, once improved data were available.

III.5.3 (31) In response to a question it was pointed out that SNA and ISIC had been made compatible as regards the definition of statistical units, i.e., the establishment (see Section IV.B.1). Furthermore SNA used the one-digit classification of ISIC and CPC in the presentation of the supply and use and related tables. The use of that detail, however, did not imply that countries could not use classifications that were adapted to their particular circumstances, or even the ISIC, Rev. 2 which had a different breakdown. The breakdowns, it was pointed out, were independent of the concepts used in the SNA with regard to establishments.

III.5.4 (32) There was some discussion about the most appropriate manner in which household and other economic activities should be covered: i.e., by surveys of household economic activities, business licenses, tax records or establishment surveys. It was generally agreed that surveys of household economic activities would be an effective supplement to establishment surveys in order to cover the smaller units operated by households. Business licenses had the disadvantage that they might often be outdated and in the case of the larger enterprises might be enterprise-oriented rather than establishment-oriented. Tax records were normally only appropriate for larger enterprises and generally were enterprise-
rather than establishment-oriented.

III.6  **Links between sector accounts and supply and use table**

III.6.1 (33)  The revised SNA included an additional table linking the classification of production accounts in the supply and use table by ISIC economic activity categories with the institutional sector classification of those accounts in the integrated accounts for the national economy. The link table included a cross-classification of value added and its components by institutional sectors and activity categories.

III.7  **Classification of transactors, transactions and assets**

III.7.1 (34)  All breakdowns in the tables and accounts of the central framework were supported by a hierarchical classification of transactions, transactors and assets. The tables presented included category detail only up to the second digit of those classifications, but could be expanded to include a further breakdown following the third, fourth and sometimes fifth digit. Countries might use that classification as a very flexible instrument, in order to adapt their national accounts to specific data limitations, specific economic circumstances and/or analytical and policy requirements of the countries in question.

**IV.  MAIN CONCEPTS AND CLASSIFICATIONS OF THE REVISED SNA**

IV.A  **TRANSFER OF RESOURCES BETWEEN COUNTRIES**  (External sector)

IV.A.0.0.1 (35)  In the general introduction it was pointed out that final recommendations regarding the external account would have to take into account the interests of small island economies, where the delineation of the external account would very much determine the magnitude of the main aggregates of the national accounts of those countries. The wish to harmonize the concepts of the BPM and the SNA had played an important role in the recommendations of the expert groups. It was hoped therefore that in their reactions, participants would not only present comments from the point of view of national accounts practices, but also take into account BPM practices and experiences.
IV.A.1  Residence

IV.A.1.0.1 (36) With regard to the residence concept, the general criterion of centre of interest was stressed. It was pointed out that a distinction should be made between the general criterion and the operational rules and that whenever there was doubt as to the relevance of the operational rules in specific cases, decisions might be taken on the basis of the general criterion, i.e., the centre of interest.

IV.A.1.1  Individuals

IV.A.1.1.1 (37) As an operational rule in determining the centre of interest and therefore residence of individuals, the one year rule used in the present BPM and 1968 SNA would be maintained. That would apply to such expatriates as migrant workers and technical assistance personnel. It would not apply to students, as they were considered as residents of their home country with which they had most of their contacts.

IV.A.1.1.2 (38) If individuals were to be considered as residents of a country, any remittances abroad to their family would be considered as transfers and therefore would remain part of GDP and of GNI, but not of GNDI of the host country. If the individuals were not considered as residents, their remittances would be considered as part of factor incomes transmitted abroad, and then their revenues would only be included in GDP, but not in GNI nor in GNDI.

IV.A.1.1.3 (39) The question was asked whether students were excluded from being residents of the host country because they did not contribute to production and income generation. If that were so, such an orientation of the residence criterion was criticized as being too production-oriented. The centre of interest in terms of consumption should also be taken into account in determining the residence of individuals.

IV.A.1.1.4 (40) Some participants wondered why individuals were being considered as inseparable as regards all their transactions. That created serious distortions in the calculations of GDP, in particular with regard to expatriates' revenues, as a large part of their revenues might not be received nor spent by them in the host country. Furthermore those revenues could not be considered as reflecting the value of their services in the calculation of GDP and output, and therefore not all those revenues should be reflected in GDP of the country.

IV.A.1.1.5 (41) Many participants expressed the view that there was a need to identify separately income and consumption of expatriates in their national accounts. Whether that should be done by adjusting the residence criterion or by presenting a breakdown of GDP and consumption by different groups of the population was not clearly expressed. Some countries did report studies that had been made to identify expatriates' transactions separately in the accounts.
IV.A.1.1.6 (42) Most representatives thought that revenues from migrant workers remitted to the countries in the subregion would generally be small and concern only such groups as seamen on foreign vessels and some migrant workers in Australia and New Zealand. However, remittances in the form of transfers were very large in certain cases.

IV.A.1.1.7 (43) In response to a question it was pointed out that expatriates' revenues could only be considered as imports of services if the production units in which those expatriates were working were not residents of the country in question. If the unit was resident, the expatriates income would be part of compensation of employees of the host country and thus included in GDP.

IV.A.1.1.8 (44) It was generally felt that the expert groups should pay more attention to the coverage of revenues to be included in GDP for expatriates who received a large part of their remuneration outside the host country, such as technical assistance personnel, as well as for expatriate businessmen.

IV.A.1.2 Enterprises

IV.A.1.2.1 (45) The same one-year rule would apply to enterprises but would have to be applied with much more care. It had been specifically decided by the expert groups that in the case of construction companies flexibility would be required, which might result in different treatment under different circumstances. Installation companies would generally not be included as residents of the country in which they operated temporarily, and offshore banks would always be included as residents of the country in which they were stationed. The resident criterion would apply to entire enterprises as well as to subsidiaries of multinationals operating in the country. Once a subsidiary was treated as a resident unit, it would be considered as a separate quasi-corporate unit.

IV.A.1.2.2 (46) Within the resident units, a further distinction needed to be made between those that were foreign controlled and those that were not. The operational rule for foreign control was 50 per cent or more foreign ownership and for those units with foreign ownership between 10 and 50 per cent, it would have to be decided on a country-by-country basis whether the smaller foreign ownership share really reflected foreign control.
IV.A.1.2.3 (47) When discussing the treatment of offshore banks, it was pointed out that implementing the recommendations to treat such units as resident would be difficult. Little information was generally available on capital entering and leaving the corporation and therefore it would also be difficult to estimate the output of such banks as no data were available on interest flows.

IV.A.1.2.4 (48) An interesting example was presented by participants regarding the operation of fishing vessels. In one of the countries of the region, there was a processing plant for fish caught by fishing vessels of neighbouring and other countries. It was clear that the fishing vessels were contracted by the country operating the processing plant in order to catch the fish. It was therefore concluded that the residence of the operation of the processing plant would extend to the fishing operation. As a result fish caught should not be included in the imports of the country operating the processing plant and only a ship rental should be entered as the import of a service in the external account of the SNA and the BPM.

IV.A.1.2.5 (49) One country reported on the installation of telecommunication facilities by a non-resident company. The installation was done by establishing local companies to carry out the actual installation. It was thought that in that particular case, the local companies should be considered as residents, even though they were created for the period of the installation and were established by the foreign installation company.

IV.A.1.2.6 (50) Another country mentioned road construction activities that were carried out over a period of three to four years. In its accounts, it treated the operation as an entirely resident operation, recording the import of equipment as a part of imports and capital formation of the country, even though the entire construction was funded and managed by non-residents.

IV.A.1.3 International organizations, including regional central banks

IV.A.1.3.1 (51) The revised SNA did not propose any modification to the treatment of international and regional organizations from a residency standpoint; they would be treated as extraterritorial from the standpoint of the country in which they were located. However, the revised SNA attempted to clarify the definition and attributes of international organizations. First, they had to have authority derived directly from the authority of their members, which might be independent states or international organizations. Second, they had to have a sovereign status, i.e., the laws and regulations of the country or countries in which they were located did not apply to them. Third, the services they produced were essentially nonmarket services or they engaged in financial intermediation at an international level.

IV.A.1.3.2 (52) In the context of international organizations the example of the Pacific Forum Line was presented. The Line was a shipping company jointly owned and managed by several countries of
the subregion. Countries had varying shares in the capital of the company and made varying use of its services. Although participants did not have all the necessary facts in their possession, it was likely from the discussion that none of the countries represented treated the company as a resident or even as a resident for the part of its share. In some of the countries that appeared to be consistent with the treatment of transport charges as charges levied by a non-resident company. The company was managed by an intergovernmental organization (the Forum Secretariat). It was felt that in order to arrive at a compatible treatment of that shipping line and its parent organization, both might be considered as an international organization in the SNA sense, thus extending the existing definition. However, in order to reach a final conclusion more information would have to be gathered on the Line, which Fiji and the ESCAP secretariat undertook to do.

IV.A.2 Reinvested earnings

IV.A.2.0.1 (53) The proposed introduction of reinvested earnings in the SNA harmonized the SNA with the present treatment of the BPM. The reinvested earnings would be introduced as part of property income paid/received in the external sector and at the same time would be reflected as an increase of foreign assets/liabilities.

IV.A.2.0.2 (54) It was pointed out that once foreign ownership was determined, the expert groups recommended that re-invested earnings would have to be imputed as part of property income between the enterprise in question and the non-resident owner, and a reverse financial flow between the foreign owner and the enterprise in which he was participating. The size of that imputation would have to be proportionally linked to the percentage of foreign ownership.

IV.A.2.0.3 (55) In response to a question, a number of participants pointed out that surveys of direct investment companies were undertaken in their countries in order to determine the size of their profits as a basis for making the imputation for reinvested earnings. Given that very recent development and the fact that most of the countries had little experience in the development of the BPM, few conclusions could be drawn in terms of the practical feasibility of the reinvested earnings concept.
In the context of reinvested earnings, a question was asked on how to treat the revenues of a fund that was invested outside the country and from which the government annually withdrew interest revenues; the capital itself could not be drawn down. It was asked whether such a fund could be considered as a direct investment operation that would be submitted to a similar type of treatment; and consequently, whether revenues generated by the fund should be imputed to the country as property income (reinvested earnings) and if not used, whether there should be a capital flow returning abroad which was available for reinvestment, or alternatively, whether the returning flow should be simply a current transfer abroad.

The representative from one of the developed countries present reiterated his country's objections to the revised treatment of reinvested earnings.

A number of modifications had been proposed with regard to the treatment of exports and imports of goods and services. Goods sent for processing abroad would be treated gross --i.e., included in exports and imports -- if there were significant changes in the characteristics of the goods in question as a result of the processing. Goods shipped between a parent company and its foreign subsidiary would be treated as if they changed ownership and therefore were to be included in exports or imports. Repairs if applied to capital goods would be treated as foreign trade in goods. Direct purchases abroad by residents and direct purchases by non-residents in the domestic market would be treated as imports and exports respectively.

Many participants felt that the terminological distinction between factor and non-factor services should be maintained, as they constituted terms which were widely used.

In response to a question, it was pointed out that fees paid by non-resident shipping vessels, even if often operating outside territorial waters would be treated as royalties, i.e., property income received from the rest of the world. In response to that comment, another participant noted that such a fee was thus included in the primary distribution of income account and would not be covered in GDP.

A further question was asked on the charges levied on goods entering the country for transshipment. It was explained that those goods would not be included in exports and imports, but that the charge would have to be recorded as the export of a service in the balance of payments and in the external account of the SNA.

A question was asked as to whether the purchase and sale of fuel that was imported into the country and subsequently sold to a foreign non-resident airline should be consolidated out of the external account. In response it was pointed out that that
should not be done, as the unit importing fuel would be considered as a resident unit, which was different from the unit purchasing the fuel for use by an outside airline. In that case, both imports and exports should be recorded.

IV.A.3.5 (63) As regards goods for processing most countries represented in the meeting reported that they had been registering such goods entering and leaving on a net basis. The reason was that only the net value of such products was taxed and that recording the flows in a gross manner would be incompatible with past tax practices. It seemed, however, that tax systems were changing in the region and that therefore countries were increasingly recording their goods for processing on a gross basis. Another example reflected the incorrect influence a tax system could have in the recording of national accounts flows: in the country in question imports of goods for processing were recorded gross while exports covered only the value added in the country. However, that problem had since been rectified.

IV.A.3.6 (64) One participant reported a difficulty that was encountered when recording the processed goods on a gross basis. No data were available on the value of the gross incoming and outgoing flows, because they were internal flows of a foreign operation.

IV.A.4 Cif vs. fob valuation of imports

IV.A.4.0.1 (65) It had been proposed that the aggregate of imports would be valued fob, but when dealing with the details of imports in a supply and use table or input-output table, cif valuations would continue to be used and an adjustment item would be included to link the two valuations of imports.

IV.A.4.1 (66) One participant wondered why the main valuation of imports in the SNA had been changed from cif to fob, while the main emphasis in the SNA remained on the cif valuation. Expert groups might review that recommendation in view of the difficulties that countries would encounter in obtaining the value of foreign insurance and freight charges levied on imports. While that estimate was made in the context of the BPM, it was not considered to be very reliable. In view of that, it might have been better to align the BPM with the 1968 SNA rather than vice versa.

IV.A.4.2 (67) A special difficulty was mentioned regarding the distinction between domestic and foreign insurance and freight charges on imports. The Seminar recalled that the Pacific Forum Line operated some of the shipping between the countries in the Pacific and was owned and operated jointly by the countries concerned. Once the residency of that jointly-operated shipping line had been resolved, the question of whether the shipping charges should be considered as charges by a foreign or domestic company could be addressed.

IV.A.5 Valuation of external transactions

IV.A.5.0.1 (68) The expert groups had generally agreed that
transactions carried out in foreign currency should be converted to local currency on the basis of the actual exchange rate used in the conversion.

IV.A.5.0.2 (69) It had been proposed by the expert groups to treat revenues obtained as a result of exchange rate differentials as a bank service charge if they constituted a normal margin between the purchase and sales price of foreign currency, as a capital gain or loss if revenues were obtained as a result of increases over time in the foreign exchange rate, and as a product tax in the presence of a multiple exchange rate system whereby the government or central bank obtained the exchange rate differentials. There had been no agreement yet on how to treat the exchange rate differential if it was received by black or parallel market dealers in foreign exchange.

IV.A.5.0.3 (70) It had been furthermore proposed that the average between buying and selling rates of exchange should be used to convert transactions in foreign currency into domestic currency, and that thus the implicit bank service charge obtained in trading foreign currencies should be incorporated in the value of the external transactions and their domestic counterparts.

IV.A.5.0.4 (71) Exchange rate differentials that were to be treated as product taxes/subsidies were not to be incorporated in the external and counterpart domestic transactions on which they were assumed to be levied. Instead, they were presented as global adjustment items in the external account. A unitary rate of exchange was used as a basis for the allocation of exchange rate differentials between different taxes. The unitary rate was used in computing the difference between the actual exchange rate of each transaction and the unitary rate, and thus in allocating the taxes/subsidies between product, income and wealth taxes that were presented as global adjustments in the external trade account, the external transactions accounts and the capital account of the external sector.
IV.A.5.0.5 (72) The discussion of valuation of external transactions in local currency was limited. Most countries reported that they used, or their currencies had close links to the currencies of Australia, New Zealand or the U.S.A., and that there were as a result very few variations over time or between transactions in the exchange rates. Therefore in most countries, average official exchange rates were used in the conversion. Black market rates and revenues resulting from those were of very little importance and no special efforts were made to cover revenues thus obtained in GDP.

IV.B INTEGRATED ANALYSIS OF PRODUCTION, INCOME GENERATION AND INCOME DISTRIBUTION (non-financial enterprises, corporate and unincorporated)

IV.B.1 Statistical units, links between establishments and enterprise units

IV.B.1.0.1 (73) In introducing the topic, it was pointed out that as in the 1968 SNA, there were two main statistical units in the revised SNA, i.e., establishments and institutional units. Establishments were defined in principle as units with a homogeneous output and operating in one location, but in order to provide flexibility and link the concept with the more practical definition of establishments in the recently revised ISIC, Rev. 3, the SNA allowed for less homogeneous units of production, which might have produced secondary products. Institutional units were the smallest units for which complete accounts including balance sheets were available. Included in the system were production accounts for activities (groups of establishments) and institutional sectors and they were linked through a cross-classification of value added as mentioned above (see Section III.5).

IV.B.1.1 (74) Participants indicated that only a limited number of countries of the subregion had a large number of multi-establishment enterprises. In the remaining countries, the majority of enterprises consisted of only one establishment.

IV.B.1.2 (75) In one country an enterprise establishment register had been developed and was being updated periodically. It was noted that although the number of multi-establishment enterprises was still limited, it was a considerable task to keep the combined register up-to-date.

IV.B.1.3 (76) In all countries of the subregion, establishments were classified by their main activity and very little effort was made to identify and segregate secondary activities.
IV.B.2 Operating surplus, entrepreneurial income, primary income

IV.B.2.0.1 (77) In the presentation of the sequence of accounts, it was explained that the revised SNA proposed to include two new income concepts, i.e., primary income and entrepreneurial income. Operating surplus was maintained as the last balancing item which could be obtained for establishments and activities; the other two items would be only available by institutional sectors. Primary income would be obtained for each sector by adding to or deducting from operating surplus compensation of employees received or paid and by further adding property income received net. Primary income thus would be the sectoral equivalent of national income for the national economy. Entrepreneurial income would be an intermediate concept between operating surplus and primary income. For corporations it would be obtained by deducting property income paid and adding property income received, and for households it would be derived by adding only property income paid in the context of running an unincorporated private enterprise. In both cases, entrepreneurial income would be close to profits before taxes. In the household sector no property income was added in the derivation of entrepreneurial income, because it was assumed that households would receive all property income in their capacity as households and not as owners of unincorporated enterprises.

IV.B.3 Valuation of output and value added

IV.B.3.0.1 (78) It had been proposed by the expert groups that the revised SNA should include three alternative valuations for output, i.e., (i) basic prices, (ii) producers' prices in the absence of VAT-type taxes and (iii) producers' prices in the presence of VAT-type taxes. The main valuation of intermediate consumption and final demand would be in market prices, i.e., purchasers' prices, even though product taxes on intermediate and final demand might be shown separately from the basic value of that intermediate and final demand. Value added and the product taxes included in value added would differ according to the three alternatives: i.e., value added and product taxes would include no entries for product taxes in alternative (i), all product taxes except import duties in alternative (ii), and all product taxes except import duties and VAT-type taxes in alternative (iii).

IV.B.3.1 (79) Many questions were asked on the classification of import taxes. It was explained that the classification of taxes on production and imports covered four types of tax: import duties, VAT-type taxes on imports which were also levied on domestic products, other product taxes that were levied on both imported and domestic products, and finally other import taxes such as fees for import licenses which were not levied directly on products as such. The first three types were product taxes and the fourth was included in other taxes on production and imports. Participants had difficulties relating the classification of import taxes to actual situations and asked for further clarification on the specific content of those taxes.

IV.B.3.2 (80) A question was asked on whether imputed valuations
for non-market subsistence production would be closer to basic prices or producers' prices. In response it was pointed out that since there would be no product taxes levied on subsistence production, basic prices and producers' prices would coincide.

IV.B.3.3 (81) In response to a question it was clarified that goods which were imported without the payment of import duties, because of special facilities provided by the law or otherwise, would be recorded in accordance with the actual transactions taking place. No import duties would be imputed.

IV.0 ROLE OF THE HOUSEHOLD SECTOR IN THE ECONOMIC PROCESS

IV.C.1 Production activities of households

IV.C.1.1 Production boundary

IV.C.1.1.1 (82) In introducing the topic, it was pointed out that the production boundary of the revised SNA had not been substantially changed from the 1968 system; only further clarifications and specifications had been introduced. In particular, it had been agreed by the expert groups that all activities producing goods would be included in the production boundary and that activities producing services would be included only if those services were rendered by one economic unit to another. In that definition, household services produced and used in the same household would be excluded from the production boundary.

IV.C.1.2 (83) Considerable discussion was devoted to the distinction and treatment of minor and major repairs in the case of owner-occupied dwellings. Some participants thought that it was confusing to state - as had been done in the discussion document (para. 46(v)) - that minor repair activities (as distinct from major repairs) were omitted from the production boundary of the system. Other participants thought that the SNA should be more precise in describing what were major repairs in that context, instead of leaving the national accountants to apply those rules to the particular circumstances of their countries.

IV.C.1.3 (84) Several participants thought that the carrying of water should not be included in the production boundary of the system. According to them, it would unnecessarily increase GDP, particularly if no data were available on the value of the water and the contribution was computed on the basis of time-use studies, in which the time spent in carrying water was multiplied by some kind of minimum wage. Furthermore it was thought that the resulting contribution to GDP of such water-carrying activities might be very different from those of fruit and fuelwood gathering, where the contributions were computed indirectly through the valuation of output for which a market price might be available.

IV.C.1.4 (85) One participant reported on the actual measurement in his country of the contribution of water carrying to GDP. Water was valued as obtained from the distribution system and to that value was added the cost of carrying it from the source to the

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IV.C.1.5 (86) Several participants commented on the recommendation of the expert groups that all goods production be included in the production boundary whether it was produced for the market or not. A specific example was presented which indicated an anomalous consequence of that recommendation; namely the catch of fish which was in most instances consumed in the fishing households. Prior to consumption the fish could be treated in order to preserve it for a longer period of time. The output of the preservation activity, which was basically a service activity carried out within the household, would have to be added to the value of the fish, as that would be the value of the final product as generally sold in the market.

IV.C.1.6 Private unincorporated enterprises vs. quasi-corporations

IV.C.1.6.1 (87) In introducing the topic, it was pointed out that quasi-corporations would be retained in the revised SNA. They would be added to the legally defined corporations in the case of market producers to form the two sectors of non-financial and financial corporations in the system. The main criterion for distinguishing quasi-corporations from unincorporated enterprises was that they kept separate accounts and withdrawals from entrepreneurial income could be separately identified. Those criteria would apply in principle to private as well as public unincorporated enterprises. In response to a question, it was clarified that all subsidiary units, including notional units created for the purchase of land by non-residents, would be treated as quasi-corporations; that treatment would be explained in the revised SNA.

IV.C.1.6.2 (88) Questions were asked on the of private unincorporated enterprises in the production and generation of income accounts of the household sector. Participants wondered whether the new guidelines on the coverage of those production units would require that the coverage of surveys of household economic activities be adjusted to include, for instance, money-lenders. At a 1987 ESCAP meeting on statistics of small-scale and household economic activities, only the intermediate results of the SNA Review had been available; later on the conclusions were adjusted in many respects, but particularly with regard to money lenders and financial auxiliaries, which had been discussed in the Expert Group on Financial Flows and Balance Sheets.

IV.C.1.6.3 (89) Some participants wondered whether tax records would be adequate as a means of identifying quasi-corporations among private unincorporated enterprises. It was not clear whether the use of that criterion, i.e., identification through tax records, could be treated as equivalent to the availability of separate accounts and information on withdrawals of entrepreneurial income, which was stipulated as a condition for the identification of those units in the revised SNA.
IV.C.2 Households

IV.C.2.1 Socio-economic groupings

IV.C.2.1.1 (90) It had been proposed by the expert groups that the revised SNA would include in the household sector two main subsectors: (i) households excluding non-profit institutions serving households, and (ii) non-profit institutions serving households. A main breakdown of households would be based mainly on source of income criteria (employees, employers, own account workers, and recipients of transfers and property income). Alternative breakdowns would also be included in the system, such as the distinction between rural and urban; however, those breakdowns would only be used for special analyses of the household sector.

IV.C.2.1.2 (91) A number of participants commented that the sub-classification of households which was recommended by the expert groups was not a useful one for analyzing the behaviour of households in the countries of the subregion. Some suggested that distinctions such as those between expatriates and locals, urban and rural, and inhabitants of the main and outlying islands would be much more useful than the sub-classification suggested.

IV.C.2.1.3 (92) Some participants also thought that the use of the reference person as the one bringing in most of the income would not work well in the case of subsistence production, where income would very much depend on the type of valuation used in output or value added.

IV.C.2.1.4 (93) Several participants thought that it would be very difficult to link the classification of households by subsectors to the production accounts of the unincorporated units that would be included in the household sector; hardly any survey would cover at the same time the household revenues and expenditures and production information. In most instances, production data would have to come from surveys of household economic activities that were separate from household surveys of incomes and expenditures. One country reported that a survey had been undertaken among households with household economic activities.

IV.C.2.1.5 (94) There was also a question on how to classify unpaid family members in the socioeconomic sub-classification of households. Another participant suggested that own account workers in agriculture should be distinguished from those in other sectors.

IV.C.2.2 Formal vs. informal sectors

IV.C.2.2.1 (95) The distinction between formal and informal sectors was one that was made between units within the household sector and applied to all their accounts. It was a distinction which would be included in the SNA, but as yet no agreement had been reached on the criteria for making the distinction.
IV.C.2.2.2 (96) In the discussion of the distinction between formal and informal activities several suggestions were made on how to separate units into the two groups. All suggestions were based on experiences of the countries concerned. Some included in the informal sector only subsistence activities; others defined the formal sector as consisting of the units that had business licenses. A third suggestion made was to include in the informal sector all subsistence, non-market and non-monetary activities. A more formal definition was used by another country, which defined the coverage of the formal sector as including all units that were legally constituted and/or were covered in the establishment survey.

IV.C.2.2.3 (97) One participant pointed out that the distinction between formal and informal would become more essential, now that the revised SNA included production accounts for households. Given the distinction between quasi-corporations and unincorporated enterprises, the majority of production units in his country and particularly in the rural areas would be in the household sector, and that would not adequately reflect the state of development. It was therefore essential that within the household sector, a distinction be made between formal and informal sector production units, so that changes in the composition of production units as a result of development could be monitored.

IV.C.2.3 Consumption expenditure, actual consumption and disposable income

IV.C.2.3.1 (98) In the presentation of the sequence of accounts, it was explained that the revised SNA proposed to include two consumption concepts for households and government. One concept called final consumption expenditure would refer to payments made by households and government for items of consumption. The second concept, called actual final consumption, would include with households those expenditures made by government that could be individualized, such as on education, health and so on, while other final consumption expenditures by government of a collective nature such as for defence and police would remain in actual final consumption of the government sector. The distinction between individualized consumption and collective consumption paid for by government would be made on the basis of COFOG categories. To the two consumption concepts for the two sectors corresponded two alternative income concepts, called disposable income and adjusted disposable income; the difference between the two would be transfers in kind from government to households that would constitute the difference between actual final consumption and final consumption expenditure of households. The total of final consumption expenditure and actual final consumption of households and government together would be the same. Also, disposable income minus consumption expenditure and adjusted disposable income minus actual final consumption for households and government would give the same savings for each sector.

IV.C.2.3.2 (99) The usefulness of the concepts of actual consumption of households and adjusted disposable income was
questioned, except for the purpose of international comparisons of household consumption levels between countries. One participant thought that adding individualizable final consumption expenditure by the government to that of households was not meaningful as households could not decide about its use. Another participant pointed out, however, that it was also needed in order to make comparisons over time.

IV.C.2.3.3 (100) Actual final consumption was furthermore thought to be an interesting concept in the measurement of relative poverty between different groups of the population. However, it was generally agreed that for that purpose there was a need for intensive data gathering in order to measure the impact of government individualizable consumption expenditure on different groups of the population. Such data were often not easily available in the subregion.

IV.C.3 Non-profit institutions including community activities

IV.C.3.0.1 (101) There were three issues regarding non-profit institutions on which the Seminar was requested to give its views. The first was the recommendation that there should no longer be a separate sector for non-profit institutions serving households as in the 1968 SNA. The second issue concerned the criteria on the basis of which non-profit institutions were allocated to the household, government and corporate sectors. The expert groups had recommended to include with the government all such institutions that were financed and controlled by the government and to allocate the remaining ones to the household and enterprise sectors on the basis of which sector they served. The third question concerned the treatment of communal production activities leading to the construction of buildings, schools, roads etc. The expert groups had recommended that such output should be considered as output of non-profit institutions, and that if the output was capital goods, they should be included with capital formation of the sector that was responsible for the upkeep of those goods.

IV.C.3.0.2 (102) While the view was expressed that the separate sector of non-profit institutions serving households might be maintained, the Seminar generally agreed with the revised treatment of those institutions.

IV.C.3.0.3 (103) The main part of the discussion was devoted to the valuation of capital formation resulting from communal activities. Most of the participants who commented thought that it was essential that imputations be made for the valuation of such labour. Several mentioned the importance of such activities in the subregion and the official encouragement in some countries of voluntary labour.

IV.C.3.0.4 (104) One participant noted the anomalies which would occur if no voluntary labour cost was imputed and the capital good thus constructed was sold on the market at a much higher price. On the other hand, it was pointed out that there were many difficulties in getting the correct value for the labour input.
Such valuation faced the same problems as would be encountered in valuing the labour involved in water carrying, firewood gathering etc.

IV.C.4  **Extensions of the household sector**

IV.C.4.0.1 (105)  In introducing the topic, reference was made to related analyses of the household sector based on household survey information. Many of those analyses, including Social Accounting Matrices (SAMs), focused on the distribution of income between different household groups and how that distribution had an impact on the purchases of goods and services. The Seminar was asked to report on such activities in the subregion and how they affected work on national accounts. They were also requested to comment on the extent to which the SNA responded to the requirements of those analyses.

IV.C.4.0.2 (106)  One participant reported on work that had been carried out on social accounting matrices in some countries in the subregion. The work often required additional data that could not be supplied by the national accounts. The compilation of SAMs had not generally been incorporated in regular statistical programmes, and as a result there had been little impact on the development of national accounts in the subregion.

IV.D  **ROLE OF THE PUBLIC SECTOR**

IV.D.1  **Imputation of rent on government-owned buildings and consumption of fixed capital on other government assets**

IV.D.1.0.1 (107)  The Seminar noted the proposal of the expert groups to introduce into the revised SNA imputations for rent on government-owned buildings. That recommendation would effectively increase the contribution of the government sector to GDP, as it would introduce the cost of capital into the calculation of output of government, which would be reflected in net operating surplus of that sector. Such an imputation would be in addition to another imputation recommended by the expert groups to introduce consumption of fixed capital on all government fixed assets, including government buildings and also roads, dams and similar structures. In recording the imputations, two options had been advanced by the expert groups. One would be to add only consumption of fixed capital and cost of capital on owner-occupied buildings in the calculation of output of government services. The other option was to create a separate establishment which would bring together all costs of government-owned buildings and would have, as output, building services which would be recorded separately from the output of government services.

IV.D.1.0.2 (108)  Most participants who commented agreed that the imputation for rent on government buildings should be incorporated in the SNA. Some, however, thought that it would distort the presentation of value added in the production of government services, as it would be the only generation of operating surplus
that would be recorded there. In view of that many participants preferred to identify a separate establishment (market producer) with an operating surplus, which could be classified separately from the units producing other government services.

IV.D.1.0.3 (109) Most participants agreed that if the government building rent imputation were introduced in the system, it should not be restricted only to the government sector, but should apply equally to non-profit institutions. They might also use their own buildings in the production of non-market services.

IV.D.1.0.4 (110) Similarly there was general agreement to introduce consumption of fixed capital on roads, dams and government structures. One of the countries was already applying consumption of fixed capital to those assets in its accounts. Several participants, however, noted that such imputations would require the development of new methods (such as the perpetual inventory method) for the estimation of capital stocks. In one of the countries of the subregion where such an attempt had been made, the experience was that those estimations were very labour intensive and took several work-years to complete.

IV.D.1.0.5 (111) It was noted that while the incorporation of such consumption of fixed capital was needed in order to account correctly for the cost of capital in the production of government services, there would be a consequent future need for international agencies to use net concepts of income instead of the present gross concepts of GDP and GNP for national and international policy purposes.

IV.D.2 Public vs. private corporations vs. unincorporated government enterprises

IV.D.2.0.1 (112) Most of the participants thought that in distinguishing private from public corporations, much more prominence should be given to the underlying criterion of control in addition to that of ownership, but stressed the need for greater clarity in the SNA documentation. It was noted that in some countries of the subregion, control -- which could be translated as essential decision-making -- was often effected with less than 50 per cent formal government ownership, and would apply even where majority ownership was foreign. In those instances, the government had a larger influence through some kind of veto power or through the appointment of a larger number of board members.

IV.D.2.0.2 (113) In the present compilation of the national accounts in the subregion, which focused on GDP by activity, establishments of "departmental" enterprises together with those of public corporations, were separately classified from units producing government services and treated as industries in the 1968 terminology. From presentations by participants, it became clear, however, that "departmental" units could be identified separately from public corporations, if institutional sector accounts were introduced. Examples of "departmental" enterprise that were mentioned were the government printing department, the public works
or construction department, an alcohol trading monopoly etc. Typical public corporations were identified as the public telecommunications enterprise, the postal service, the electricity company, a public fishing corporation, a housing corporation etc.

IV.D.3  Market and non-market production

IV.D.3.0.1  (114) It had been proposed by the expert groups to distinguish between market and non-market producers and market and non-market products. Typically, market producers would cover 50 per cent or more of their cost through sales and non-market producers less than 50 per cent. The price of market products would be determined on the basis of a market price, while non-market products would be valued on the basis of cost. There were still open questions about whether all corporations should be classified as market producers or whether the 50 per cent criterion should also be applied. The other outstanding issue was whether to allocate quasi-corporations which did not meet the 50% criterion to the government sector or the corporate sector and when the latter option was taken, whether to value their output at prices actually paid with a subsidy to cover the shortfall, or at cost and to treat the cost not covered by sales as government consumption.

IV.D.3.0.2  (115) Most participants stressed the importance of using the criterion of intention to make a profit. Such a criterion should be used as an important supplement to the rule of 50 per cent cost coverage. In some instances it might have to supersede that "mechanical" rule. One participant noted that if only the 50 per cent rule were to apply it would be very difficult to use it to decide about the market or non-market character of a unit in its initial years of operation, when there might still be losses.

IV.D.3.0.3  (116) One instance was mentioned of an enterprise (a resort hotel) which had considerable losses in its operations, but where those were compensated by revenues (property income) from its investments; the question was asked whether property income receipts should be taken into account in assessing the cost coverage of producing units.

IV.D.4  Classification of taxes, social transfers and other public sector transfers

IV.D.4.0.1  (117) The coverage and classification of taxes had been adjusted by the expert groups, in an effort to harmonize the SNA and GFS in that area. The following changes had been recommended. The coverage of taxes in the SNA would be the same as tax revenue in GFS except for the inclusion in tax revenue of GFS of social security contributions which were included in SNA as social transfers. The revised SNA would no longer use the terms direct, indirect and commodity taxes; those would be replaced respectively by current taxes on income, wealth etc., taxes on production and imports, and taxes on products. Another tax category, to be called capital taxes, had been added to taxes in the SNA; that category, had been included as a sub-item of capital transfers and covered inheritance and similar taxes received by the
government. Within the tax categories of SNA, no distinction would be made between taxes paid by households and business. All such taxes, which were treated in the 1968 SNA as indirect taxes if paid by business and as direct taxes or current transfers if paid by households, were all to be included either as current taxes on income, wealth etc. or were to be treated as payments for government services.

IV.D.4.0.2 (118) While many questions were asked on details of the modifications in the classification of tax and non-tax revenues, there was general support for the changes that had been introduced in order to align SNA and GFS.

IV.E FINANCIAL INSTRUMENTS, FINANCIAL SECTOR AND FINANCIAL ACCOUNTS

IV.E.1 Financial intermediaries and financial auxiliaries

IV.E.1.0.1 (119) The revised SNA recommended that the financial sector should be expanded to include auxiliary enterprises that facilitated financial intermediation, in addition to enterprises which were primarily engaged in financial transactions in the market consisting of both incurring liabilities and acquiring financial assets. The main reasons for that change were the increased provision of financial services by financial intermediaries, the inappropriateness of placing a growing group of financial service enterprises in the non-financial corporate sector, the difficulty of drawing the line between financial auxiliaries and intermediaries, and the likelihood that further innovations in the financial sector would continue to blur that distinction.

IV.E.1.0.2 (120) One participant opposed the inclusion of financial auxiliaries in the coverage of financial corporations. In his view, those units had clearly very different functions from other units in the sector and therefore would show a very different structure of accounts and balance sheets.

IV.E.1.0.3 (121) Another participant suggested that in the classification of financial corporations at the second level of detail, a distinction should be made within "insurance companies and pension funds" (5) between life insurance schemes and pension funds (5.1) on the one hand and casualty insurance schemes (5.2) on the other.

IV.E.2 Financial intermediation services, including the services of banks, insurance and pension schemes

IV.E.2.0.1 (122) In introducing the topic, it was pointed out that a number of changes had been suggested with regard to the output and distribution of output of financial intermediaries, i.e., banks and insurance companies. In the case of banks it had been proposed that bank output was a real output, which was only approximated by adding to actual bank service charges, imputed charges based on the difference between property income received and paid. In other words, the character of the imputation had been
changed but not the imputation itself. It had been furthermore recommended that the imputed charges be allocated to users together with the actual bank service charges. One recommendation which was being further investigated was to allocate the service charge to each sector on the basis of the difference between interest received or paid on the one hand, and a reference interest rate on the other. The imputed service paid by each user would be deducted from the interest paid by bank borrowers and added to the interest received by depositors in order to arrive at a pure interest rate. The latter would be recorded as property income received and paid in the appropriation of primary income account.

IV.E.2.0.2 (123) In the case of insurance service charges, the expert groups had recommended that property income on technical reserves be added in calculating the service charge of casualty insurance. That recommendation was based on the recognition that premiums of casualty insurance companies had been reduced in recent years, as those companies drew part of their revenues from investments of their technical reserves. It was recommended that the amended treatment be applied to both casualty and life insurance service charges.

IV.E.2.0.3 (124) There was some discussion about whether development banks would be included as financial corporations. Many of those banks were only distributing funds from the government and did not operate on the financial market. The question was asked whether such banks worked only with funds obtained from government or international organizations. If that were the case, they would be construed as operating with their own funds and would have no (financial intermediation) output, and thus would be non-market producers.

IV.E.2.0.4 (125) There was considerable discussion of moneylenders, who fulfilled a very important financial function especially in the rural areas where there was less access to formal banks. It was generally agreed that those units mainly operated with their own funds, which they accumulated through high interest charges. In the strict SNA sense, such units would again have no imputed output, as they did not work on borrowed funds in any major way. The expert groups were requested by the Seminar to review such cases and determine what their imputed output would be and which part of their revenues would be considered property income.

IV.E.3 Financial leasing

IV.E.3.1 (126) It had been proposed that the revised SNA introduce a distinction between financial and operational leases. Operational leases would be treated as rental services. In the case of financial leases, the capital asset was assumed to have been transferred between the lessor and the lessee, and included in the capital formation of the latter. The financial lease payments would be treated as if they consisted of a service charge, the repayment of a loan and the payment of interest on the loan. The distinction between the two types of leases would be made on the basis of the extent to which maintenance charges on the asset were
transferred to the lessee.

IV.E.3.2 (127) A question was asked about the treatment of an aircraft which had recently been leased for a period of four years from a foreign lessor who charged 65 per cent of the operating cost to the lessee, with an option to buy the plane after the contract expired. Following the recommendations of the expert group would result in large capital formation (and imports) which introduced difficulties from the point of view of economic analysis. Nevertheless, it was suggested that the transaction be treated as a financial lease even though it had some of the characteristics of an operational lease.

IV.E.4 Treatment of gold

IV.E.4.0.0.1 (128) Some participants mentioned that gold holdings by individuals were an important use of gold. It would therefore be too restrictive to include only monetary gold in financial assets. Participants therefore suggested that the definition of financial assets should be extended to include financial gold.

IV.F INTEGRATION OF STOCK ANALYSIS WITH THE TRADITIONAL FLOW ANALYSIS OF THE NATIONAL ACCOUNTS

IV.F.0.0.1 (129) In introducing the various topics concerning the valuation, classification and coverage of assets, it was pointed out that the asset question as a whole was still an unresolved issue. The subject would be taken up in the December 1990 Expert Group Meeting on SNA Co-ordination, and participants were therefore urged to present their views so that the expert groups could take them into account. The Seminar took note of a heightened emphasis on assets stemming from developments outside the national accounting framework, such as concern for environmental degradation and natural resource depletion. Analysis of stocks as compared to flows was thus assuming greater importance and a number of conceptual and practical issues were emerging.

IV.F.1 General principles: coverage, classification, valuation and moment of recording of assets

IV.F.1.0.1 (130) The revised SNA would distinguish at the first level of detail between non-financial and financial assets. Within non-financial assets, a second-level distinction would be made between produced and non-produced assets, and within each, at the third level of detail, between tangible and intangible assets. An innovation that had been discussed in expert groups was to introduce into the system fixed assets that would be intangible but produced, including research and development, capitalized mineral exploration cost, computer software and literary artistic work. In classifying changes of assets, a distinction was made between gross capital formation, net purchases of land and other non-produced assets, other volume changes in assets and liabilities, nominal holding gains or losses, and changes in classification and structure (of assets and liabilities). The distinction between produced and non-produced assets was not necessarily the same in
the classification of stocks of assets as in the changes in assets. Gross capital formation could take place, e.g., the use of a produced asset as improvement in land, which would not appear as an asset in the stock of assets, as it would be incorporated in the value of the land. Similarly, capital repairs were a category in gross fixed capital formation, but did not show up as a separate asset in the stock of assets, as their value was incorporated in the value of the buildings or structures which had been repaired.

IV.F.1.0.2 (131) One participant expressed the view that real estate transfers should be identified as a separate asset as they could not be allocated to individual asset categories in this country.

IV.F.1.0.3 (132) The Seminar discussed at length the asset boundary in the revised SNA, and possible extensions. Suggestions for the latter included natural forests, coral reefs, fish stocks, mangrove swamps, beaches, and potable water, although practical data problems in most of those areas were acknowledged. It was pointed out that inclusion of an asset within the asset boundary implied the existence of some costs in order to maintain it, as well as a reasonably close relationship between the asset and the income, if any, generated by it. The classification of mineral assets which had been identified but were not currently being exploited was also raised. Those distinctions were thought to need further clarification.

IV.F.1.0.4 (133) Some doubt was expressed about the distinction between tangible and intangible assets, which might not be readily discernible in cases such as software.

IV.F.1.0.5 (134) As regards the moment of recording of assets, some difficulty was expressed concerning the change of ownership criterion, since in some cases, e.g., the construction of dwellings commissioned by an individual, no change of ownership took place. The Seminar noted that similar views had been expressed at earlier meetings and would be taken into account in the further review process.

IV.F.2 Military durables

IV.F.2.0.1 (135) In introducing the topic, it was mentioned that as it was not clear what had led the expert groups of the 1968 SNA to suggest the existing treatment, a survey of some of the experts who participated in the previous review had been undertaken. That, however, did not lead to any clue as to the logic behind the treatment. Two expert groups in the present review had therefore discussed the question at length. There had been a sharp division of opinion on what would be the appropriate treatment. While some experts had favoured the retention of the existing treatment, others wanted complete reversal, i.e., inclusion of all military durables as gross fixed capital formation. The majority, however, favoured the inclusion of only that part of such durables which could be acquired for civilian uses such as schools, hospitals, motor vehicles, computers etc.
IV.F.2.0.2 (136) Some participants doubted the advisability of the treatment of large capital outlays as government final consumption expenditure, as those would artificially increase government consumption from one period to another in the small island countries.

IV.F.2.0.3 (137) Other participants preferred the full inclusion of all military durables in gross fixed capital formation, although they acknowledged that data problems could exist. They argued that non-inclusion of weapons and similar military hardware in capital formation, on the grounds that they were very much at risk during war, could not be easily defended as civilian assets could also be destroyed in wartime.

IV.F.2.0.4 (138) A remaining group of participants thought that the inclusion of assets such as schools, hospitals etc. would be more justified for the same reasons as mentioned by the expert groups.

IV.F.2.0.5 (139) Two interesting examples were presented of military equipment that had not been destroyed in wartime. In one country warships which had not been fully destroyed had become a tourist attraction, which was generating income. Another example concerned tunnels constructed for shelter which were currently utilized for laying pipelines.

IV.F.3 Mineral exploration

IV.F.3.0.1 (140) In introducing the topic it was explained that in the 1968 SNA, only successful exploration was treated as gross fixed capital formation and the remaining part as intermediate consumption. The expert groups, after reviewing country practices of some oil-producing nations, concluded that the whole of the exploratory expenditure on minerals should be treated as gross fixed capital formation. The related question of whether such an asset should be classified as a tangible or intangible fixed produced asset still needed to be decided, although at present it was classified in the revised SNA classification of assets as intangible.

IV.F.3.0.2 (141) Some participants commented that inclusion of exploration expenses as capital would unnecessarily inflate gross fixed capital formation. They preferred exploratory expenditures to be classified as capital only if there was a reasonable probability of success, which was of course difficult to determine.

IV.F.3.0.3 (142) A problem specific to small island economies was that foreign companies were licensed on a year-to-year basis for exploration. Once it became clear that there was not much chance of success, they would abandon the exploration and the knowledge gained by them remained without value for the country. On the other hand, for the country where the oil company was resident, unsuccessful exploratory expenditures could be very valuable as they generated knowledge which could be used in future
explorations. There was an apparent conflict between the assignment of such expenses to capital formation in the country where the exploitation took place and in the country where the oil company was resident.

**IV.F.4 Other produced intangible fixed assets**

IV.F.4.0.1 (143) The other extensions of intangible fixed capital relating to software, R & D and intellectual property were then introduced. The inclusion of expenditures on R & D and intellectual property in capital expenditures would raise some problems with regard to the present treatment of intangible assets like patents and copyrights. The latter might have to be excluded from the balance sheets of the SNA if the total value of related intangible assets were to be included as intangible fixed produced assets.

IV.F.4.0.2 (144) Most participants agreed with the inclusion of systems software, but not application software, in capital formation. Those participants who spoke on R & D were not in favour of its capitalization, because they found it difficult to define the asset, to determine its life and thus estimate the corresponding consumption of fixed capital.

**IV.F.5 Environmental assets**

IV.F.5.0.1 (145) It was indicated in the introduction to the topic that environmental assets consisted of three main groups, (i) natural cultivated assets which were included under produced fixed assets, (ii) land and (iii) subsoil assets, both of which were included under tangible non-produced assets. The natural cultivated assets included all products including animals for breeding, dairy, draught etc.; timber tracts and cultivated forests; plantations, orchards, vineyards etc.; and fisheries. It was proposed that all such products of controlled or cultivated natural growth be recorded as output at the moment of growth. Output of such controlled natural growth processes was considered as work-in-progress which added to changes in stocks and in some instances to gross fixed capital formation such as in the case of the growth of animals for breeding, dairy and draught. The output value might be based on market values.

IV.F.5.0.2 (146) During the discussion some participants favoured the proposal in principle to estimate output of natural growth assets on the basis of growth instead of harvest.

IV.F.5.0.3 (147) One participant pointed out that his country did not include growth of livestock in output and capital formation, mainly because of data problems. Another participant pointed out that in the calculation of output, not only reproduction of livestock but also growth in weight of livestock should be taken into account.

IV.F.5.0.4 (148) Some participants asked whether growth of fish in the ocean should also be included in output. In response it was pointed out that such treatment should be applied if the stocks of
fish were included in the asset boundary. Many participants thought that inclusion of that type of asset would be difficult because fish migrated from one territorial base to another. However, other participants pointed out that studies of the stock of fish were being made as well as of their movements between different parts of the ocean. It was unlikely that estimates of national stock could be produced, although regional estimates would be. It was possible to consider shares of that regional stock as a national asset. Such treatment was already possible in the case of river and lake fish.

IV.F.6  Links between SNA and environmental accounting

IV.F.6.0.1 (149) The meeting was informed that in parallel with the review of the SNA a Handbook on Environmental Accounting was being developed in co-operation between UNSO and the World Bank. The accounting framework which was the centre of that Handbook was directly linked to the framework of the SNA. The basic question asked of participants was whether it would be correct for environmental accounting concepts to be included in the central framework of the SNA or in satellite accounts. An intermediate position was also possible in which some elements of the environmental accounts were incorporated in the central framework. For example, environmental protection services could be identified within the ISIC and CPC categories of the SNA, or as was tentatively suggested in an OECD meeting, a depletion allowance could be included as a separate element of value added.

IV.F.6.0.2 (150) In discussing the asset boundary, the Seminar noted the conceptual linkage between the national accounts and the much newer field of environmental accounting. An asset such as an unutilized natural forest would, under the present proposals, remain outside the asset boundary of the SNA but within the environmental asset boundary. When exploitation commenced, it would be "debited" to the environmental assets and "credited" to the stock of economic assets in the national accounts sense.

IV.F.6.0.3 (151) Most participants favoured the extension of national accounts to encompass environmental accounting, but only in satellite accounts. The Seminar agreed that environmental aspects were extremely important for the Pacific subregion. It was at the same time emphasized that the smaller island countries currently had difficulties in compiling national accounts and would encounter further data problems with the revised SNA. Thus inclusion of environmental accounts for those countries, even as satellite accounts, would remain a long-term goal.

IV.G  ANALYSIS OF INFLATION

IV.G.0.0.1 (152) Most of the countries present at the meeting had only limited experience with the complexities of constant price estimation, except for the extrapolation of base year gross product by means of volume indicators. A question was raised concerning the correct method of handling quality change in such circumstances.
IV.G.1 Chain indices

IV.G.1.0.1 (153) In the discussion of chain indices, the complications (from both a theoretical and practical viewpoint) were highlighted. It was pointed out that as well as problems of additivity, the need for comparisons over a number of years limited the usefulness of chain indices.

IV.G.1.0.2 (154) Only one country indicated any experience with the actual use of chain indices in the compilation of its national accounts, and it was likely that it would revert to the more traditional methodology.

IV.G.1.0.3 (155) With respect to the choice of base year, the need for a normal year was stressed by one participant. Averaging two or three years was suggested for some erratic series as a method for overcoming the choice of an abnormal base year.

IV.G.2 Unique products

IV.G.2.0.1 (156) One country was already using the suggested methodology of having carefully defined structures of buildings valued by experts for successive periods.

IV.G.2.0.2 (157) During the discussion it was pointed out that, especially in the case of some imported equipment, products might be unique to some countries but not to others. Hence, it might be possible to construct a price index which combined information from the producing country (output price indices) with an index reflecting changes in the exchange rate between the two countries.

IV.G.3 Price and volume measures for non-market goods and services

IV.G.3.0.1 (158) It was suggested that further work needed to be carried out in determining the output of non-market services. For example, it was argued that it was too simplistic to assume that education should be extrapolated by teaching hours as there was more to the output of education than simply hours of teaching provided (e.g., student counseling, organizing extra-curricular activities etc.).

IV.G.4 Trading gains and losses from changes in the terms of trade

IV.G.4.0.1 (159) Contrary to the 1968 SNA, the revised system would explicitly include recommendations for terms of trade measurement. In response to a question, it was explained that the terms of trade would encompass all goods and services imported and exported, not simply goods.

IV.G.4.0.2 (160) A question was asked as to whether the revised SNA would provide specific guidelines in the choice of the numeraire with which to deflate the balance on goods and services. It was explained that there were different analytical uses available dependent upon the choice -- the SNA did not wish to emphasize one type of analysis over another.
IV.G.4.0.3 (161) With regard to the recommendation of using an arithmetic average of \( P_x \) and \( P_m \) as the numeraire, one participant pointed out that that could lead to biased results and that a weighted average would be preferable.

IV.G.5  **Real National Disposable Income**

IV.G.5.0.1 (162) The revised SNA recommended that real disposable income should be derived, but recognized that there was no unique way of defining income aggregates in real terms.

IV.G.5.0.2 (163) During the discussion one participant expressed the view that using the implicit price deflator (IPD) for Net Domestic Final Expenditure (NDFE) was not the best choice of deflator, as experience had shown that any deflator which included changes in stocks was likely to be erratic. Hence, it was suggested that the IPD for NDFE excluding changes in stocks should be used.

IV.G.5.0.3 (164) The Seminar noted that the issue was not relevant for many of the countries present, as their national accounting development had not reached that stage.

**V. SNA REVIEW FROM THE PACIFIC POINT OF VIEW**

V.0.0.1 (165) There were a few SNA-related issues that participants felt were particularly important to the Pacific subregion. They related to the extension of the asset boundary to areas such fishing stocks and mangrove swamps, and more broadly defined environmental assets such as clean air and water. The Seminar welcomed the efforts of the UNSO and the World Bank in jointly preparing a Handbook on Environmental Accounts. It stressed the need for the concepts used in the environmental accounts to be as consistent as possible with the SNA, but recalled its preference that environmental accounts be developed as satellite accounts rather than as part of the central national accounts framework.

**VI. IMPLEMENTATION OF THE REVISED SNA**

VI.0.0.1 (166) The Seminar was informed of the preparation by the UNSO of a series of handbooks to assist in the compilation of national accounts. The topics to be covered included input-output tables, national accounts compilation methodology, household sector accounts and enterprise accounts. It noted that the Handbooks on Production Accounts and Public Sector Accounts had already been produced. Though the former was based on the 1968 SNA, it was felt that its orientation remained relevant. The Seminar noted that the IMF would revise its manual on Government Finance Statistics which could be used for SNA purposes, and thus the Handbook on Public Sector Accounts would not be revised. It was mentioned that the handbooks would provide elaborations on the conceptual framework of the system, as well as guidelines on the compilation of data, and the experiences of national accountants with specific conditions in their countries could be usefully reflected in the handbooks.
The Seminar recalled that a manual on non-monetary sector valuation had been prepared by ESCAP, SPC and UNDAT in 1974. It suggested that the Handbook should be updated and a further co-operative effort to hold a workshop on that topic should be undertaken.

The Seminar noted that technical assistance in various forms such as regional advisory services on national accounts, and organization of seminars, workshops and training courses could assist countries in the implementation of the revised SNA. Mention was made of possible joint activities between ESCAP and SIAP or SPC in promoting the implementation of the revised SNA in the Pacific countries. It was also suggested that SIAP might consider conducting advanced workshops/seminars on national accounts. Quite apart from assisting in implementing the revised SNA, workshops focusing on the practical aspects of compiling national accounts were considered essential for the Pacific subregion. The Seminar noted, however, that a further round of regional/subregional meetings such as the present one might not be held before adoption of the revised SNA by the Statistical Commission, both for financial reasons and because of the tight schedule of the revision process. Instead, an interregional meeting in early 1992 was being planned to which several Asian and Pacific countries would be invited.

Appreciation was expressed of the provision of advisory services in national accounts by the secretariat which would be even more essential in view of the SNA revision. It was suggested that one adviser was inadequate for the needs of the entire Asia-Pacific region. The Seminar noted with concern the critical inadequacy of travel funds for official missions by the current regional adviser and urged the secretariat to resolve the problem. It noted with appreciation that Australia and New Zealand were prominent in providing technical assistance to developing countries in the subregion. It welcomed the possibility of UNSO and ESCAP helping in the formulation of proposals for funding support for projects designed to facilitate the adoption of the SNA in countries.

The Seminar noted with interest that UNSO had developed software for the compilation of national accounts. That software was not yet user-friendly, but could be adapted to country analytical needs and statistical facilities. The UNSO could undertake further technical missions to assist countries in utilizing the software.

While considering technical assistance indispensable in the process of implementing the revised SNA, the participants also noted the importance of convincing national administrations of the uses and relevance of national accounts in the management and development of their economies. It was also stressed that international organizations using national accounts aggregates in their policy-making would need to be made aware of the new concepts and particularly of the income concepts act of the
consumption of fixed capital now recommended in the revised SNA.

VII. ADOPTION OF THE REPORT

VII.0.0.1 (172) The Seminar adopted its report on 7 September 1990.
Annex I
List of documents

STAT/PSNA/L.1 Provisional Agenda
STAT/PSNA/1 Discussion Paper for 1990
Regional Commissions Meetings on SNA
(provisional) Chapter II: An Overview of the System
the

Chapter III: Institutional Units

and

Chapter IV: Sector and Sub-

sectors

Chapter V: The production

Accounts

Chapter VI: Final Expenditures

Chapter VII: The production accounts for Industries and the Input-Output Tables

Chapter VIII: Taxes and other

Transfers

Chapter IX: Factor Incomes and Property Incomes

Financial Net

Chapter X: The Capital and Accounts

Net Measures

Chapter XI: Balance Sheets and Worth

Chapter XII: Price and Volume

Framework
Circumstances and

Chapter XIII: Application of the Integrated Framework to Various needs

Annex 2: GFS-SNA Relationships
Annex 5: Changes in Stocks and Holding

Gains

Annex 6: The Leasing of Equipment
and the Renting of Buildings

CRP. 1

Briefing Notes on SNA Review Issues by the Bureau of Statistics,

Fiji
### Annex II

#### List of Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>BPM</td>
<td>Balance of Payments Manual</td>
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<tr>
<td>cif</td>
<td>Cost Including Insurance and Freight</td>
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<td>CPC</td>
<td>Central Product Classification</td>
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<tr>
<td>COFOG</td>
<td>Classification of Functions of Government</td>
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<td>ESCAP</td>
<td>Economic and Social Commission for Asia and the Pacific</td>
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<td>FAO</td>
<td>Food and Agriculture Organisation of the United Nations</td>
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<tr>
<td>fob</td>
<td>Free on board ship or aircraft</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GFS</td>
<td>Government Finance Statistics</td>
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<td>GNDI</td>
<td>Gross National Disposable Income</td>
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<td>GNI</td>
<td>Gross National Income</td>
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<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
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<td>IPD</td>
<td>Implicit price deflator</td>
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<td>ISIC</td>
<td>International Standard Industrial Classification of all Economic Activities</td>
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<tr>
<td>MBS</td>
<td>Money and Banking Statistics</td>
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<tr>
<td>MPS</td>
<td>System of Material Products and Balances</td>
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<td>NDFE</td>
<td>Net Domestic Final Expenditure</td>
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<td>NDP</td>
<td>Net Domestic Product</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<td>SAM</td>
<td>Social Accounting Matrix</td>
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<td>SIAP</td>
<td>Statistical Institute for Asia and the Pacific</td>
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<td>SNA</td>
<td>United Nations System of National Accounts</td>
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<td>SPC</td>
<td>South Pacific Commission</td>
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<td>UNDAT</td>
<td>United Nations Development Advisory Team for the South Pacific</td>
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<tr>
<td>UNSO</td>
<td>United Nations Statistical Office</td>
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<tr>
<td>R + D</td>
<td>Research and Development</td>
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